



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

VALLEY REGIONAL OFFICE

Douglas W. Domenech
Secretary of Natural Resources

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David K. Paylor
Director

Amy Thatcher Owens
Regional Director

February 15, 2011

Mr. Paul J. Hasemeyer
Senior Vice President
Green Bay Packaging Inc.
P.O. Box 3568
Winchester, Virginia 22604-2575

Facility: Winchester Coated Products Division
Location: Frederick County
Registration No.: 81158
Plant ID No.: 51-069-0108

Dear Mr. Hasemeyer:

Attached is a minor modification to your permit to operate a pressure sensitive material manufacturing facility pursuant to 9 VAC 5 Chapter 80, Article 1, of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates the insignificant emission unit recently installed at your facility. This permit modifies your operating permit dated May 18, 2009.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on December 9, 2010.

This permit approval shall not relieve Green Bay Packaging Inc. of the responsibility to comply with all other local, state and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult this and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call Kelly R. Showalter at (540) 574-7843.

Sincerely,



B. Keith Fowler
Deputy Regional Director

Attachment: Permit

- c: Director, OAPP (electronic file submission)
- Manager, Data Analysis (electronic file submission)
- Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised; modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

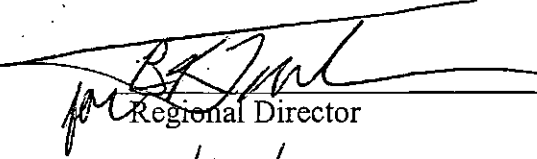
Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Green Bay Packaging Inc.
Facility Name: Green Bay Packaging Inc. – Winchester Coated Products
Division
Facility Location: 285 Park Center Drive
Fort Collier Industrial Park
Frederick County, Virginia 22603
Registration Number: 81158
Permit Number: VRO81158

Effective Date
May 18, 2009

Expiration Date
May 17, 2014

Minor Modification Date
2/15/11


Regional Director

2/15/11
Signature Date

Table of Contents, 2 pages
Permit Conditions, 41 pages
NSPS Subpart RR (submitted electronically)
NESHAP Subpart JJJJ (submitted electronically)

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I. Facility Information

Permittee

Green Bay Packaging Inc.
P.O. Box 19017
Green Bay, Wisconsin 54307-9017

Responsible Official

Paul J. Hasemeyer
Senior Vice President

Facility

Green Bay Packaging Inc. - Winchester Coated Products Division
P.O. Box 3568
Winchester, Virginia 22604-2575

Contact Person

Tom Schibly
Division Manager
(540) 678-2600

County-Plant Identification Number: 51-069-0108

Facility Description: NAICS 322222 (Coated and Laminated Paper Manufacturing) and SIC Code 2672 (Coated and Laminated Paper, NEC)

Green Bay Packaging Inc. Winchester Coated Products Division manufactures pressure sensitive materials for the Roll Label industry. The material is manufactured in wide web, bulk roll form on a large machine called a tandem coating line. All coatings and laminating are done in one process. This process is broken down into various stages. Liner rolls are mounted on a turret and are coated with a solventless silicone. The silicone is applied to a gravure roll, which is deposited to a rubber roll and in turn is transferred to the liner. Dryer #1 cures the silicone on the liner. After a cooling and moisturizing stage, the liner is coated with a water-based adhesive by one of three methods. These methods are the Gravure, Mayer rod, or a slot die mechanism. Dryer #2 dries the adhesive. Facer rolls are mounted on the turret. A primer coating is applied to the backside of the face stock. The prime coat consists of a light coatweight of a clay slurry applied by either Mayer rod or Gravure methods. Dryer #3 dries the prime coat. The face material then comes in contact with the silicone-coated liner carrying adhesive in the laminating station. The combined product is rewound into larger diameter rolls. Emission sources include the coating operations and the gas-fired dryers.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Tandem Coating Line							
1		Egan Machinery Company #920282 (constructed 1992) (NSPS Subpart RR) with a total gas-fired rated capacity of 14.4 mmBTU per hour, consisting of:					01/21/04, as amended 02/12/09
	1A/1B	A - Adhesive Application/Dryer #2 B - Primer Application/Dryer #3	563 gallons/hour 187 gallons/hour				
	1C	C - Silicone Application/Dryer #1	19 gallons/hour				

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Process Equipment Requirements – Tandem Emulsion Coating Line (Unit 1)

A. Limitations

1. Volatile organic compound (VOC) emissions from the operation of the tandem emulsion coating line, as calculated on a weighted monthly average, shall not exceed 0.20 pound of VOC per pound of coating solids applied.
(9 VAC 5-80-110, 40 CFR 60.442(a)(1), and Condition 6 of 01/21/04 Permit, as amended 02/12/09)
2. Each coating, as delivered by each coating applicator of the tandem emulsion coating line, shall not exceed 2.9 pounds of volatile organic compounds per gallon of coating, excluding water.
(9 VAC 5-80-110 and 9 VAC 5-40-4330 A)
3. Volatile organic compound emissions from the tandem emulsion coating line shall be controlled by the use of water-based adhesives and low solvent coatings.
(9 VAC 5-80-110, 9 VAC 5-40-4340, and Condition 2 of 01/21/04 Permit, as amended 02/12/09)
4. The permittee shall take reasonable precautions to minimize volatile organic compound emissions from cleaning or purging operations. Reasonable precautions may include the following:
 - a. The use of detergents, high pressure water, or other non-volatile cleaning methods;
 - b. The minimization of the quantity of volatile organic compounds used to clean lines of equipment; and
 - c. The adjustment of production schedules to minimize coating changes thereby reducing the need for frequent cleaning or purging of a system.
(9 VAC 5-80-110 and 9 VAC 5-40-4330 E)
5. Volatile organic compounds shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
(9 VAC 5-80-110 and Condition 3 of 01/21/04 Permit, as amended 02/12/09)

6. Emissions from the operation of the tandem emulsion coating line shall not exceed the limits specified below:

Particulate Matter (coating operations)	123.0 lbs/day	21.8 tons/yr
PM-10 (coating operations)	123.0 lbs/day	21.8 tons/yr
Volatile Organic Compounds (coating operations)		92.4 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110 and Condition 7 of 01/21/04 Permit, as amended 02/12/09)

7. Visible Emissions from each tandem emulsion coating line stack shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-40-60, and Condition 8 of 01/21/04 Permit, as amended 02/12/09)

B. Monitoring and Recordkeeping

1. Each calendar month, the permittee shall determine compliance with the VOC limit in Condition III.A.1 by calculating the weighted average of the mass of solvent used per mass of coating solids applied using the following formula:

$$G = \frac{\sum_{i=1}^n W_{oi} M_{ci}}{\sum_{i=1}^n W_{si} M_{ci}}$$

(Equation III-1)

Where:

- G = the calculated weighted average mass (lb) of VOC per mass (lb) of coating solids applied each calendar month.
- M_{ci} = the total mass (lb) of each coating (i) applied during the calendar month as determined from facility records.
- W_{oi} = the weight fraction of VOC applied of each coating (i) applied during a calendar month as determined by using Reference Method 24 or by the coating manufacturer's formulation data.

W_{si} = the weight fraction of solids applied of each coating (i) applied during a calendar month as determined by using Reference Method 24 or by the coating manufacturer's formulation data.

(9 VAC 5-80-110, 40 CFR 60.443(a), and Conditions 12 and 14 of 01/21/04 Permit, as amended 02/12/09)

2. The permittee shall determine compliance with the VOC limits in Condition III.A.6 by calculating the VOC emissions as follows:

$$E = \sum_{i=1}^n M_{ci} W_{oi}$$

(Equation III-2)

Where:

E = the VOC emissions in pounds per time period

M_{ci} = the total mass (lb) of each coating (i) applied during each time period as determined from facility records.

W_{oi} = the weight fraction of VOC applied of each coating (i) applied during each time period as determined from coating manufacturer's formulation data or alternative method approved by the Department.

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110)

3. The permittee shall determine compliance with the PM and PM-10 limits in Condition III.A.6 by calculating the PM and PM-10 emissions as follows:

$$E = F \times S$$

(Equation III-3)

Where:

E = the PM or PM-10 emissions in pounds per time period

F = weight fraction of PM and PM-10 for each silicone coating used

S = amount of silicone coating applied in pound per time period

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110)

4. The permittee shall monitor and maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
 - a. Certified Material Safety Data Sheets (MSDS)/VOC Data Sheets or other equivalent documentation showing VOC content, water content, and solids content for each coating used.
 - b. Coating records sufficient to show compliance with the volatile organic compound content limit contained in Condition III.A.2.
 - c. Daily throughput (in pounds), weighted average VOC and solids fractions, and the VOC to solids ratio of each coating used in the tandem emulsion coating line.
 - d. Daily and annual emissions (in pounds) of VOC, PM, and PM-10 from the tandem emulsion coating line. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
 - e. Monthly and annual throughput and VOC content of cleaning solvents used (in pounds), calculated monthly as the sum of each consecutive 12-month period.
 - f. Results of all visible emission evaluations and performance evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-40-4420, 9 VAC 5-40-4390, 40 CFR 60.445(a), and Condition 9 of 01/21/04 Permit, as amended 02/12/09)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 15 of 01/21/04 Permit, as amended 02/12/09)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use appropriate methods in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

D. Reporting

1. The permittee shall submit a quarterly report to the Director, Valley Regional Office, of exceedances of the VOC emission limit specified in Condition III.A.1 for the tandem emulsion coating line. If no such exceedances occur during a particular quarter, a report stating this shall be submitted to the Director, Valley Regional Office, semi-annually. One copy of the quarterly/semi-annual report shall be submitted to the U.S. EPA at the following address:

Associate Director, Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Reports shall be submitted in accordance with the schedule contained in Condition III.D.2.

(9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR 60.447(b), and Condition 10 of 01/21/04 Permit, as amended 02/12/09)

2. The permittee shall submit a report to the Director, Valley Regional Office, in accordance with the following schedule:

Time Period Covered by Report	Report Due Date
January 1 – March 31	June 1
April 1 – June 30	September 1 *
July 1 – September 30	December 1
October 1 – December 31	March 1 *

*semi-annual report dates

Each quarterly report shall contain, at a minimum, the dates included in the calendar quarter and a summary of the information requested in parts b, c, and d of Condition III.B.4.

(9 VAC 5-80-110, 9 VAC 5-50-50 and Condition 11 of 01/21/04 Permit, as amended 02/12/09)

IV. Fuel Burning Conditions

A. Limitations

1. The approved fuels for process equipment at the facility are natural gas and liquefied petroleum gas (propane). A change in the fuels may require a permit.
(9 VAC 5-80-110 and Condition 5 of 01/21/04 Permit, as amended 02/12/09)
2. The tandem emulsion coating line dryers shall not emit sulfur dioxide emissions in excess of the following limit:

$$S = 2.64K$$

(Equation V-1)

Where:

S = allowable emission of sulfur dioxide expressed in lb/hr

K = actual heat input at total capacity expressed in mmBtu/hr

(9 VAC 5-80-110 and 9 VAC 5-40-280)

B. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:

1. The daily and annual throughput of natural gas (in cubic feet) and the daily and annual throughput of liquid petroleum gas (propane) (in gallons) for all fuel burning equipment.
2. Fuel purchase records including type of fuel purchased.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 9 of 01/21/04 Permit, as amended 02/12/09)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate test methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

D. Boiler MACT Applicability

Emission units 3A, 3R, 3T and 3U (as identified in Section VII. Insignificant Emission Units) will be subject to 40 CFR Part 63, Subpart DDDDD (Industrial/Commercial/Institutional Boilers and Process Heater NESHAP (Boiler MACT)) when promulgated, unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the first substantive compliance date of the Boiler MACT.
(9 VAC 5-80-110)

V. Facility Wide Conditions for Hazardous Air Pollutant Emissions

A. Applicability

1. The following terms and conditions are the requirements of 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Pollutants: Paper and Other Web Coating. A current copy of 40 CFR Part 63 Subpart JJJJ has been attached. As used in this section, all terms shall have the meaning as defined in 40 CFR 63.2 and 40 CFR 63.3310. The effective date of this section was December 5, 2005. Compliance with the standard may be demonstrated in units of lb per lb applied.
(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR Part 63 Subpart JJJJ)
2. Unless the facility is operating under the operating scenario pursuant to Section VI of this permit, the facility shall be subject to the limitations, monitoring, recordkeeping, performance tests, reporting, and notifications of Section V of this permit.
(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR Part 63 Subpart JJJJ)
3. Contemporaneous with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility the date of the change and the compliance option in effect.
(9 VAC 5-80-110 J and 40 CFR 70.6 (a)(9))

B. Limitations

Organic Hazardous Air Pollutant (HAP) emissions from the operation of the tandem emulsion coating line (Unit 1) shall be limited for each month to the level specified as follows:

1. No more than 5 percent of the organic HAP applied; or
2. No more than 4 percent of the mass of coating materials applied; or
3. No more than 20 percent of the mass of coating solids applied.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3320(b)(1), (2) & (3))

C. Monitoring and Recordkeeping

1. **Compliance Determination** – To demonstrate compliance with the emission standards contained in Condition V.B when using “as-purchased” compliant coating materials, the permittee shall demonstrate that each coating material used does not exceed 0.2 kg organic HAP per kg coating solids as purchased.
(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3370(b)(1))

2. **Compliance Determination** – To demonstrate compliance with the emission standards contained in Condition V.B when using “as-applied” compliant coating materials, the permittee shall demonstrate using one of the following options:

- a. Each coating material used does not exceed 0.2 kg organic HAP per kg coating solids “as-applied”. When using this option, the permittee shall calculate the “as-applied” coating solids content which are reduced, thinned, or diluted prior to application and calculate the “as-applied” organic HAP to coating solids ratio using the following equations:

(1)

$$C_{asi} = \frac{\left(C_{si}M_i + \sum_{j=1}^q C_{sij}M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation V-1)

Where:

- C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.

(2)

$$H_{si} = \frac{C_{ahi}}{C_{asi}}$$

(Equation V-2)

Where:

- H_{si} = As-applied, organic HAP to coating solids ratio of coating material, i.

- C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

- b. Monthly average of all coating materials used does not exceed 0.2 kg organic HAP per kg coating solids "as-applied" on a monthly average basis. When using this option, the permittee shall calculate the monthly average, "as-applied", organic HAP to coating solids ratio using the following equation:

$$H_S = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret}}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij}}$$

(Equation V-3)

Where:

- H_S = Monthly average, as-applied, organic HAP to coating solids ratio, kg organic HAP/kg coating solids applied.
- p = Number of different coating materials applied in a month.
- C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.
- M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where the permittee chooses to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere.
- C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{sij} = Coating solids content of coating material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3370(c))

3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
 - a. Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of Condition V.D.1.
 - b. Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of V.D.3.
 - c. On a monthly basis, material usage, organic HAP usage, volatile matter usage, and coating solids usage and compliance demonstrations using these data in accordance with the requirements of Conditions V.C.1 and V.C.2.
 - d. Compliance option operating log in accordance with Condition V.A.3.
 - e. All performance test results.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3410(a)(1)(iii), (iv), and (vi))

D. Performance Tests

Prior to using a new or reformulated coating material at the facility, the permittee shall comply with the requirements of either Condition V.D.1., V.D.2., V.D.3., or V.D.4. below.

1. **Performance Tests for "As-Purchased" Organic HAP Mass Fraction** – Determine the organic HAP mass fraction of each coating material "as-purchased" by one of the following procedures:
 - a. **Method 311** – The permittee may test the coating material in accordance with EPA Method 311 of 40 CFR Part 63, Appendix A. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the permittee. The organic HAP content must be calculated according to the criteria and procedures as follows:
 - (1) Include each organic HAP determined to be present at greater than or equal to 0.1 mass percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 mass percent for other organic HAP compounds.

- (2) Express the mass fraction of each organic HAP you include according to paragraph (1) above as a value truncated to four places after the decimal point (for example, 0.3791).
 - (3) Calculate the total mass fraction of organic HAP in the tested material by summing the counted individual organic HAP mass fractions and truncating the result to the three places after the decimal point (for example, 0.763).
- b. **Method 24** – For coatings, the permittee may determine the volatile organic content as mass fraction of nonaqueous volatile matter and use it as a substitute for organic HAP using EPA Method 24 of 40 CFR Part 60, Appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee.
 - c. **Formulation Data** – The permittee may use formulation data to determine the organic HAP mass fraction of a coating material. Formulation data may be provided to the permittee by the manufacturer of the material. In the event of an inconsistency between Method 311 (Appendix A of 40 CFR Part 63) test data and a facility's formulation data, and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200 (d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used.

If the organic HAP content values are not determined using Method 311, Method 24, or Formulation Data, the permittee must submit an alternative test method for determining their values for approval by the Director, Valley Regional Office and the U.S. EPA in accordance with 40 CFR 63.7(f).

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360 (c)(1), (2), and (3))

2. **Performance Tests for "As-applied" Organic HAP Mass Fraction** – The permittee shall determine the organic HAP or volatile matter and coating solids content of coating materials according to the following procedures:
 - a. If the "as-purchased" coating material is applied to the web without any solvent or other material added, then the "as-applied" organic HAP mass fraction is equal to the "as-purchased" organic HAP mass fraction. Otherwise, the "as-applied" organic HAP mass fraction must be calculated as stated in paragraph b. below.
 - b. Calculate the organic HAP mass fraction of each coating material "as-applied" using the following equation:

$$C_{ahi} = \frac{\left(C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation V-4)

Where:

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.

C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360(c)(4))

3. **Performance Tests for Volatile Organic and Coating Solids Content** – The permittee may choose to use the volatile organic content as a surrogate for the organic HAP content of coatings. If this option is chosen, the permittee shall determine the “as-purchased” volatile organic content and coating solids content of each coating material applied using one of the following procedures:
 - a. **Method 24** - The permittee may determine the volatile organic and coating solids mass fraction of each coating applied using EPA Method 24 (40 CFR Part 60, Appendix A). The Method 24 determination may be performed by the manufacturer of the material and the results provided to the permittee. If these values cannot be determined using Method 24, the permittee must submit an alternative technique for determining their values for approval by the Director, Valley Regional Office and the U.S. EPA.
 - b. **Formulation Data** – The permittee may determine the volatile organic content and coating solids content of a coating material based on formulation data and may rely on volatile organic content data provided by the manufacturer of the material. If the event of any inconsistency between the formulation data and the results of Method 24 of 40 CFR Part 60, Appendix A, and the Method 24 results

are higher, the results of Method 24 will govern.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360(d)(1) and (2))

4. Performance Tests for Volatile Organic and Coating Solids Content – The permittee shall determine the “as-applied” volatile organic content and the “as-applied” coating solids content of coating materials according to the following procedures:

- a. If the “as-purchased” coating material is applied to the web without any solvent or other material added, then the “as-applied” volatile organic content is equal to the “as-purchased” volatile content and the “as-applied” coating solids content is equal to the “as-purchased” coating solids content. Otherwise, the “as-applied” volatile organic content must be calculated as stated in paragraph b below and the “as-applied” coating solids content must be calculated as stated in paragraph c below.
- b. Calculate the “as-applied” volatile organic content of each coating material using the following equation:

$$C_{avi} = \frac{C_{vi}M_i + \sum_{j=1}^q C_{vij}M_{ij}}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation V-5)

Where:

- C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

- c. Calculate the "as-applied" coating solids content of each coating material using the following equation:

$$C_{asi} = \frac{\left(C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation V-6)

Where:

- C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360(d)(3))

5. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use appropriate methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

E. Reporting

1. The permittee shall submit a semiannual compliance report to the Director, Valley Regional Office, of exceedances of the emission limitations specified in Condition V.B for each affected source. Each report shall contain, at minimum, the following information:
 - a. The company name and address.
 - b. A statement by a responsible official with the official's name, title, and signature certifying the accuracy of the content of the report.

- c. The date of the report and the beginning and ending dates of the reporting period.
- d. If there are no deviations from any of the emission limitations contained in Condition V.B, a statement that there were no deviations from the emission limitations during the reporting period.
- e. For each deviation from an emission limitation specified in Condition V.B, the report shall must also contain the following information:
 - (1) The total operating time of each affected source during the reporting period,
 - (2) Information on the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3400(c))

2.. Reports shall be in accordance with the following schedule:

Time Period Covered by Report	Report Due Date
January 1 – June 30	September 1
July 1 – December 31	March 1

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3400(c)(v))

VI. Alternative Facility Wide Conditions for HAP Emissions

A. Applicability

1. The following terms and conditions are the requirements of 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Pollutants: Paper and Other Web Coating. A current copy of 40 CFR Part 63 Subpart JJJJ has been attached. As used in this section, all terms shall have the meaning as defined in 40 CFR 63.2 and 40 CFR 63.3310. The effective date of this section was December 5, 2005. Compliance with the standard may be demonstrated in units of lb per lb applied.
(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR Part 63 Subpart JJJJ)
2. Unless the facility is operating under the operating scenario pursuant to Section V of this permit, the facility shall be subject to the limitations, monitoring, recordkeeping, performance tests, reporting, and notifications of Section VI of this permit.
(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR Part 63 Subpart JJJJ)
3. Contemporaneous with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility the date of the change and the compliance option in effect.
(9 VAC 5-80-110 J and 40 CFR 70.6 (a)(9))

B. Limitations

Organic Hazardous Air Pollutant (HAP) emissions from the operation of the tandem emulsion coating line (Unit 1) shall be limited for each month to the level specified as follows:

1. No more than 5 percent of the organic HAP applied; or
2. No more than 4 percent of the mass of coating materials applied; or
3. No more than 20 percent of the mass of coating solids applied.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3320(b)(1), (2) & (3))

C. Monitoring and Recordkeeping

1. **Compliance Determination** – To demonstrate compliance with the emission standards contained in Condition VI.B when using “as-purchased” compliant coating materials, the permittee shall demonstrate that each coating material used does not exceed 0.04 kg organic HAP per kg coating material as purchased.
(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3370(b)(1))

2. **Compliance Determination** – To demonstrate compliance with the emission standards contained in Condition VI.B when using “as-applied” compliant coating materials, the permittee shall demonstrate by one of the following options:

- a. Each coating material used does not exceed 0.04 kg organic HAP per kg coating material “as-applied”. When using this option, the permittee shall calculate the “as-applied” organic HAP content of the “as-purchased” coating material which are reduced, thinned, or diluted prior to application using one of the following equations:

(1)

$$C_{ahi} = \frac{\left(C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation VI-1)

Where:

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.

C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(2)

$$C_{avi} = \frac{\left(C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation VI-2)

Where:

- C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

- b. Monthly average of all coating materials used does not exceed 0.04 kg organic HAP per kg coating material "as-applied" on a monthly average basis. When using this option, the permittee shall calculate the monthly average "as-applied" organic HAP content of all coating materials applied using the following equation:

$$H_L = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret}}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}}$$

(Equation VI-3)

Where:

- H_L = Monthly average, as-applied, organic HAP content of all coating materials applied, expressed as kg organic HAP per kg of coating material applied, kg/kg.
- p = Number of different coating materials applied in a month.
- C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where the permittee chooses to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere.

3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
 - a. Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of Condition VI.D.1.
 - b. Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of VI.D.3.
 - c. On a monthly basis, material usage, organic HAP usage, volatile matter usage, and coating solids usage and compliance demonstrations using these data in accordance with the requirements of Conditions VI.C.1 and VI.C.2.
 - d. Compliance option operating log in accordance with Condition VI.A.3.
 - e. All performance test results.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3410(a)(1)(iii), (iv), and (vi))

D. Performance Tests

Prior to using a new or reformulated coating material at the facility, the permittee shall comply with the requirements of either Condition VI.D.1., VI.D.2., VI.D.3., or VI.D.4. below.

1. **Performance Tests for "As-Purchased" Organic HAP Mass Fraction** – Determine the organic HAP mass fraction of each coating material "as-purchased" by one of the following procedures:
 - a. **Method 311** – The permittee may test the coating material in accordance with EPA Method 311 of 40 CFR Part 63, Appendix A. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the permittee. The organic HAP content must be calculated according to the criteria and procedures as follows:

- (1) Include each organic HAP determined to be present at greater than or equal to 0.1 mass percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 mass percent for other organic HAP compounds.
 - (2) Express the mass fraction of each organic HAP you include according to paragraph (1) above as a value truncated to four places after the decimal point (for example, 0.3791).
 - (3) Calculate the total mass fraction of organic HAP in the tested material by summing the counted individual organic HAP mass fractions and truncating the result to the three places after the decimal point (for example, 0.763).
- b. **Method 24** – For coatings, the permittee may determine the volatile organic content as mass fraction of nonaqueous volatile matter and use it as a substitute for organic HAP using EPA Method 24 of 40 CFR Part 60, Appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee.
- c. **Formulation Data** – The permittee may use formulation data to determine the organic HAP mass fraction of a coating material. Formulation data may be provided to the permittee by the manufacturer of the material. In the event of an inconsistency between Method 311 (Appendix A of 40 CFR Part 63) test data and a facility's formulation data, and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200 (d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used.

If the organic HAP content values are not determined using Method 311, Method 24, or Formulation Data, the permittee must submit an alternative test method for determining their values for approval by the Director, Valley Regional Office and the U.S. EPA in accordance with 40 CFR 63.7(f).

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360 (c)(1), (2), and (3))

2. **Performance Tests for "As-applied" Organic HAP Mass Fraction** – The permittee shall determine the organic HAP or volatile matter and coating solids content of coating materials according to the following procedures:
 - a. If the "as-purchased" coating material is applied to the web without any solvent or other material added, then the "as-applied" organic HAP mass fraction is equal to the "as-purchased" organic HAP mass fraction. Otherwise, the "as-applied" organic HAP mass fraction must be calculated as stated in paragraph b. below.

- b. Calculate the organic HAP mass fraction of each coating material "as-applied" using the following equation:

$$C_{ahi} = \frac{\left(C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation VI-4)

Where:

- C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360(c)(4))

3. **Performance Tests for Volatile Organic and Coating Solids Content** – The permittee may choose to use the volatile organic content as a surrogate for the organic HAP content of coatings. If this option is chosen, the permittee shall determine the "as-purchased" volatile organic content and coating solids content of each coating material applied using one of the following procedures:
- a. **Method 24** - The permittee may determine the volatile organic and coating solids mass fraction of each coating applied using EPA Method 24 (40 CFR Part 60, Appendix A). The Method 24 determination may be performed by the manufacturer of the material and the results provided to the permittee. If these values cannot be determined using Method 24, the permittee must submit an alternative technique for determining their values for approval by the Director, Valley Regional Office and the U.S. EPA.
- b. **Formulation Data** – The permittee may determine the volatile organic content and coating solids content of a coating material based on formulation data and may rely on volatile organic content data provided by the manufacturer of the material. In the event of any inconsistency between the formulation data and the

results of Method 24 of 40 CFR Part 60, Appendix A, and the Method 24 results are higher, the results of Method 24 will govern.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360(d)(1) and (2))

4. **Performance Tests for Volatile Organic and Coating Solids Content** – The permittee shall determine the “as-applied” volatile organic content and the “as-applied” coating solids content of coating materials according to the following procedures:

- a. If the “as-purchased” coating material is applied to the web without any solvent or other material added, then the “as-applied” volatile organic content is equal to the “as-purchased” volatile content and the “as-applied” coating solids content is equal to the “as-purchased” coating solids content. Otherwise, the “as-applied” volatile organic content must be calculated as stated in paragraph b below and the “as-applied” coating solids content must be calculated as stated in paragraph c below.
- b. Calculate the “as-applied” volatile organic content of each coating material using the following equation:

$$C_{avi} = \frac{C_{vi}M_i + \sum_{j=1}^q C_{vij}M_{ij}}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation VI-5)

Where:

- C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

- c. Calculate the “as-applied” coating solids content of each coating material using the following equation:

$$C_{asi} = \frac{\left(C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}}$$

(Equation VI-6)

Where:

- C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
 C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
 M_i = Mass of as-purchased coating material, i, applied in a month, kg.
 q = Number of different materials added to the coating material.
 C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
 M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.
 M_i = Mass of as-purchased coating material, i, applied in a month, kg.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3360(d)(3))

5. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use appropriate methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

E. Reporting

1. The permittee shall submit a semiannual compliance report to the Director, Valley Regional Office, of exceedances of the emission limitations specified in Condition VI.B for each affected source. Each report shall contain, at minimum, the following information:
 - a. The company name and address.
 - b. A statement by a responsible official with the official's name, title, and signature certifying the accuracy of the content of the report.
 - c. The date of the report and the beginning and ending dates of the reporting period.

- d. If there are no deviations from any of the emission limitations contained in Condition VI.B, a statement that there were no deviations from the emission limitations during the reporting period.
- e. For each deviation from an emission limitation specified in Condition VI.B, the report shall also contain the following information:
- (1) The total operating time of each affected source during the reporting period,
 - (2) Information on the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3400(c))

2. Reports shall be in accordance with the following schedule:

Time Period Covered by Report	Report Due Date
January 1 – June 30	September 1
July 1 – December 31	March 1

(9 VAC 5-80-110, 9 VAC 5-60-100 and 40 CFR 63.3400(c)(v))

VII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
1A/1B, 1C	Cleaning/Maintenance Activities	9 VAC 5-80-720 B	VOC, HAPs	
3A	Rite Humidification Boiler & Boiler Water Chemicals	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	1,650,000 BTU/hr (Onsite but not in service)
3B	Hot Water Heaters & Boiler Water Chemicals	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	250,000 BTU/hr
3C, 3D	Office Heating Boiler & Boiler Water Chemicals	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	650,000 BTU/hr
3E – 3J	Space Unit Heaters	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	1,200,000 BTU/hr
3K – 3O	Dock Door Heaters	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	650,000 BTU/hr
3P	Maintenance Heater	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	60,000 BTU/hr
3Q	Tank Room Heater	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	75,000 BTU/hr
3R	Cleaver-Brooks Steam Generating Boiler & Boiler Water Chemicals	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	1,045,000 BTU/hr
3S	Plant Area Heater	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	60,000 BTU/hr
3T	Miura Steam Generating Boiler/Boiler Water Chemicals	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	1,969,000 BTU/hr

3U	Miura Steam Generating Boiler/ Boiler Water Chemicals	9 VAC 5-80-720 C	VOC, HAPs, PM/PM-10, NO _x , CO, SO _x	1,969,000 BTU/hr
T4-T9 & T16-T18	Fixed Roof Internal Storage Tanks for Water-based Adhesives/Primers	9 VAC 5-80-720 B	VOC, HAPs	8,325 Gallons
T10-T15	Fixed Roof Internal Storage Tanks for Water-based Adhesives/Primers	9 VAC 5-80-720 B	VOC, HAPs	2,650 Gallons
19	Safety Kleen Parts Washer or Equivalent (solvent or aqueous based)	9 VAC 5-80-720 B	VOC, HAPs	30 Gallon Unit
20	Slitters / Rewinders / Trim Conveying / Coaters Web Cleaning Dust Collection Units / Silicone Mist Vacuum Units / Core Cutters	9 VAC 5-80-720 B	VOC, PM/PM-10	-
21	Lime Make-up Tanks for the Batch Wastewater Pretreatment System	9 VAC 5-80-720 B	PM/PM-10	-
22	Diatomaceous Earth (or equivalent) Make-up Tanks for the Batch Wastewater Pretreatment System	9 VAC 5-80-720 B	PM/PM-10	-
23	Wastewater Pretreatment System Chemicals (e.g. polymers, alum, ferrous sulfate, ferric chloride)	9 VAC 5-80-720 B	VOC, HAPs, PM/PM-10	-
24	Shrink Wrap Heat Guns / System	9 VAC 5-80-720 B	VOC	-

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed to be in compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Not applicable for any of the storage tanks (Units T4 through T18); each unit is below the applicability capacity of less than 75 m ³ (19,812.9 gallons).

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant to section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Valley Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Valley Regional Office, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Valley Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether

acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

Electronic Code of Federal Regulations

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e-CFR Data is current as of April 16, 2009**Title 40: Protection of Environment****PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES**[Browse Previous](#) | [Browse Next](#)**Subpart RR—Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations****Source:** 48 FR 48375, Oct. 18, 1983, unless otherwise noted.**§ 60.440 Applicability and designation of affected facility.**

(a) The affected facility to which the provisions of this subpart apply is each coating line used in the manufacture of pressure sensitive tape and label materials.

(b) Any affected facility which inputs to the coating process 45 Mg (50 tons) of VOC or less per 12 month period is not subject to the emission limits of §60.442(a), however, the affected facility is subject to the requirements of all other applicable sections of this subpart. If the amount of VOC input exceeds 45 Mg (50 tons) per 12 month period, the coating line will become subject to §60.442(a) and all other sections of this subpart.

(c) This subpart applies to any affected facility which begins construction, modification, or reconstruction after December 30, 1980.

[48 FR 48375, Oct. 18, 1983, as amended at 65 FR 61761, Oct. 17, 2000]

§ 60.441 Definitions and symbols.

(a) Except as otherwise required by the context, terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Coating applicator means an apparatus used to apply a surface coating to a continuous web.

Coating line means any number or combination of adhesive, release, or precoat coating applicators, flashoff areas, and ovens which coat a continuous web, located between a web unwind station and a web rewind station, to produce pressure sensitive tape and label materials.

Coating solids applied means the solids content of the coated adhesive, release, or precoat as measured by Method 24.

Flashoff area means the portion of a coating line after the coating applicator and usually before the oven entrance.

Fugitive volatile organic compounds means any volatile organic compounds which are emitted from the coating applicator and flashoff areas and are not emitted in the oven.

Hood or enclosure means any device used to capture fugitive volatile organic compounds.

Oven means a chamber which uses heat or irradiation to bake, cure, polymerize, or dry a surface coating.

Precoat means a coating operation in which a coating other than an adhesive or release is applied to a surface during the production of a pressure sensitive tape or label product.

Solvent applied in the coating means all organic solvent contained in the adhesive, release, and precoat formulations that is metered into the coating applicator from the formulation area.

Total enclosure means a structure or building around the coating applicator and flashoff area or the entire coating line for the purpose of confining and totally capturing fugitive VOC emissions.

VOC means volatile organic compound.

(b) All symbols used in this subpart not defined below are given meaning in the Act or in subpart A of this part.

a =the gas stream vents exiting the emission control device.

b =the gas stream vents entering the emission control device.

C_{aj} =the concentration of VOC (carbon equivalent) in each gas stream (j) exiting the emission control device, in parts per million by volume.

C_{bi} =the concentration of VOC (carbon equivalent) in each gas stream (i) entering the emission control device, in parts per million by volume.

C_{fk} =the concentration of VOC (carbon equivalent) in each gas stream (k) emitted directly to the atmosphere, in parts per million by volume.

G =the calculated weighted average mass (kg) of VOC per mass (kg) of coating solids applied each calendar month.

M_{ci} =the total mass (kg) of each coating (i) applied during the calendar month as determined from facility records.

M_r =the total mass (kg) of solvent recovered for a calendar month.

Q_{aj} =the volumetric flow rate of each effluent gas stream (j) exiting the emission control device, in dry standard cubic meters per hour.

Q_{bi} =the volumetric flow rate of each effluent gas stream (i) entering the emission control device, in dry standard cubic meters per hour.

Q_{fk} =the volumetric flow rate of each effluent gas stream (k) emitted to the atmosphere, in dry standard cubic meters per hour.

R =the overall VOC emission reduction achieved for a calendar month (in percent).

R_q =the required overall VOC emission reduction (in percent).

W_{oi} =the weight fraction of organics applied of each coating (i) applied during a calendar month as determined from Method 24 or coating manufacturer's formulation data.

W_{si} =the weight fraction of solids applied of each coating (i) applied during a calendar month as determined from Method 24 or coating manufacturer's formulation data.

[48 FR 48375, Oct. 18, 1983, as amended at 65 FR 61761, Oct. 17, 2000]

§ 60.442 Standard for volatile organic compounds.

(a) On and after the date on which the performance test required by §60.8 has been completed each owner or operator subject to this subpart shall:

(1) Cause the discharge into the atmosphere from an affected facility not more than 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month; or

(2) Demonstrate for each affected facility:

(i) A 90 percent overall VOC emission reduction as calculated over a calendar month; or

(ii) The percent overall VOC emission reduction specified in §60.443(b) as calculated over a calendar month.

§ 60.443 Compliance provisions.

(a) To determine compliance with §60.442 the owner or operator of the affected facility shall calculate a weighted average of the mass of solvent used per mass of coating solids applied for a one calendar month period according to the following procedures:

(1) Determine the weight fraction of organics and the weight fraction of solids of each coating applied by using Reference Method 24 or by the coating manufacturer's formulation data.

(2) Compute the weighted average by the following equation:

$$G = \frac{\sum_{i=1}^n W_{oi} M_{ci}}{\sum_{i=1}^n W_{si} M_{ci}}$$

(3) For each affected facility where the value of G is less than or equal to 0.20 kg VOC per kg of coating solids applied, the affected facility is in compliance with §60.442(a)(1).

(b) To determine compliance with §60.442(a)(2), the owner or operator shall calculate the required overall VOC emission reduction according to the following equation:

$$R_q = \frac{G - 0.20}{G} \times 100$$

If R_q is less than or equal to 90 percent, then the required overall VOC emission reduction is R_q . If R_q is greater than 90 percent, then the required overall VOC emission reduction is 90 percent.

(c) Where compliance with the emission limits specified in §60.442(a)(2) is achieved through the use of a solvent recovery system, the owner or operator shall determine the overall VOC emission reduction for a one calendar month period by the following equation:

$$R = \sum_{i=1}^n \frac{M_r}{W_{oi} M_{ci}} \times 100$$

If the R value is equal to or greater than the R_q value specified in paragraph (b) of this section, then compliance with §60.442(a)(2) is demonstrated.

(d) Where compliance with the emission limit specified in §60.442(a)(2) is achieved through the use of a

solvent destruction device, the owner or operator shall determine calendar monthly compliance by comparing the monthly required overall VOC emission reduction specified in paragraph (b) of this section to the overall VOC emission reduction demonstrated in the most recent performance test which complied with §60.442(a)(2). If the monthly required overall VOC emission reduction is less than or equal to the overall VOC reduction of the most recent performance test, the affected facility is in compliance with §60.442(a)(2).

(e) Where compliance with §60.442(a)(2) is achieved through the use of a solvent destruction device, the owner or operator shall continuously record the destruction device combustion temperature during coating operations for thermal incineration destruction devices or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration destruction devices. For thermal incineration destruction devices the owner or operator shall record all 3-hour periods (during actual coating operations) during which the average temperature of the device is more than 28 °C (50 °F) below the average temperature of the device during the most recent performance test complying with §60.442(a)(2). For catalytic incineration destruction devices, the owner or operator shall record all 3-hour periods (during actual coating operations) during which the average temperature of the device immediately before the catalyst bed is more than 28 °C (50 °F) below the average temperature of the device during the most recent performance test complying with §60.442(a)(2), and all 3-hour periods (during actual coating operations) during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test complying with §60.442(a)(2).

(f) After the initial performance test required for all affected facilities under §60.8, compliance with the VOC emission limitation and percentage reduction requirements under §60.442 is based on the average emission reduction for one calendar month. A separate compliance test is completed at the end of each calendar month after the initial performance test, and a new calendar month's average VOC emission reduction is calculated to show compliance with the standard.

(g) If a common emission control device is used to recover or destroy solvent from more than one affected facility, the performance of that control device is assumed to be equal for each of the affected facilities. Compliance with §60.442(a)(2) is determined by the methods specified in paragraphs (c) and (d) of this section and is performed simultaneously on all affected facilities.

(h) If a common emission control device is used to recover solvent from an existing facility (or facilities) as well as from an affected facility (or facilities), the overall VOC emission reduction for the affected facility (or facilities), for the purpose of compliance, shall be determined by the following procedures:

(1) The owner or operator of the existing facility (or facilities) shall determine the mass of solvent recovered for a calendar month period from the existing facility (or facilities) prior to the connection of the affected facility (or facilities) to the emission control device.

(2) The affected facility (or facilities) shall then be connected to the emission control device.

(3) The owner or operator shall determine the total mass of solvent recovered from both the existing and affected facilities over a calendar month period. The mass of solvent determined in paragraph (h)(1) of this section from the existing facility shall be subtracted from the total mass of recovered solvent to obtain the mass of solvent recovered from the affected facility (or facilities). The overall VOC emission reduction of the affected facility (or facilities) can then be determined as specified in paragraph (c) of this section.

(i) If a common emission control device(s) is used to destruct solvent from an existing facility (or facilities) as well as from an affected facility (or facilities), the overall VOC emission reduction for the affected facility (or facilities), for the purpose of compliance, shall be determined by the following procedures:

(1) The owner or operator shall operate the emission control device with both the existing and affected facilities connected.

(2) The concentration of VOC (in parts per million by volume) after the common emission control device shall be determined as specified in §60.444(c). This concentration is used in the calculation of compliance for both the existing and affected facilities.

(3) The volumetric flow out of the common control device attributable to the affected facility (or facilities) shall be calculated by first determining the ratio of the volumetric flow entering the common control device attributable to the affected facility (facilities) to the total volumetric flow entering the common control device from both existing and affected facilities. The multiplication of this ratio by the total

volumetric flow out of the common control device yields the flow attributable to the affected facility (facilities). Compliance is determined by the use of the equation specified in §60.444(c).

(j) Startups and shutdowns are normal operation for this source category. Emissions from these operations are to be included when determining if the standard specified at §60.442(a)(2) is being attained.

[48 FR 48375, Oct. 18, 1983, as amended at 65 FR 61761, Oct. 17, 2000]

§ 60.444 Performance test procedures.

(a) The performance test for affected facilities complying with §60.442 without the use of add-on controls shall be identical to the procedures specified in §60.443(a).

(b) The performance test for affected facilities controlled by a solvent recovery device shall be conducted as follows:

(1) The performance test shall be a one calendar month test and not the average of three runs as specified in §60.8(f).

(2) The weighted average mass of VOC per mass of coating solids applied for a one calendar month period shall be determined as specified in §60.443(a) (1) and (2).

(3) Calculate the required percent overall VOC emission reduction as specified in §60.443(b).

(4) Inventory VOC usage and VOC recovery for a one calendar month period.

(5) Determine the percent overall VOC emission reduction as specified in §60.443(c).

(c) The performance test for affected facilities controlled by a solvent destruction device shall be conducted as follows:

(1) The performance of the solvent destruction device shall be determined by averaging the results of three test runs as specified in §60.8(f).

(2) Determine for each affected facility prior to each test run the weighted average mass of VOC per mass of coating solids applied being used at the facility. The weighted average shall be determined as specified in §60.443(a). In this application the quantities of W_{oi} , W_{si} , and M_{ci} shall be determined for the time period of each test run and not a calendar month as specified in §60.441.

(3) Calculate the required percent overall VOC emission reduction as specified in §60.443(b).

(4) Determine the percent overall VOC emission reduction of the solvent destruction device by the following equation and procedures:

$$R = \frac{\sum_{i=1}^n Q_{ci} C_{ci} - \sum_{i=1}^n Q_{ci} C_{di}}{\sum_{i=1}^n Q_{ci} C_{ci}} \times 100$$

(i) The owner or operator of the affected facility shall construct the overall VOC emission reduction system so that all volumetric flow rates and total VOC emissions can be accurately determined by the applicable test methods and procedures specified in §60.446(b).

(ii) The owner or operator of an affected facility shall construct a temporary total enclosure around the coating line applicator and flashoff area during the performance test for the purpose of capturing fugitive VOC emissions. If a permanent total enclosure exists in the affected facility prior to the performance test and the Administrator is satisfied that the enclosure is totally capturing fugitive VOC emissions, then no additional total enclosure will be required for the performance test.

(iii) For each affected facility where the value of R is greater than or equal to the value of R_q calculated in §60.443(b), compliance with §60.442(a)(2) is demonstrated.

§ 60.445 Monitoring of operations and recordkeeping.

- (a) The owner or operator of an affected facility subject to this subpart shall maintain a calendar month record of all coatings used and the results of the reference test method specified in §60.446(a) or the manufacturer's formulation data used for determining the VOC content of those coatings.
- (b) The owner or operator of an affected facility controlled by a solvent recovery device shall maintain a calendar month record of the amount of solvent applied in the coating at each affected facility.
- (c) The owner or operator of an affected facility controlled by a solvent recovery device shall install, calibrate, maintain, and operate a monitoring device for indicating the cumulative amount of solvent recovered by the device over a calendar month period. The monitoring device shall be accurate within ± 2.0 percent. The owner or operator shall maintain a calendar month record of the amount of solvent recovered by the device.
- (d) The owner or operator of an affected facility operating at the conditions specified in §60.440(b) shall maintain a 12 month record of the amount of solvent applied in the coating at the facility.
- (e) The owner or operator of an affected facility controlled by a thermal incineration solvent destruction device shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the solvent destruction device's exhaust gases. The monitoring device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 °C.
- (f) The owner or operator of an affected facility controlled by a catalytic incineration solvent destruction device shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the gas temperature both upstream and downstream of the catalyst bed.
- (g) The owner or operator of an affected facility controlled by a solvent destruction device which uses a hood or enclosure to capture fugitive VOC emissions shall install, calibrate, maintain, and operate a monitoring device which continuously indicates that the hood or enclosure is operating. No continuous monitor shall be required if the owner or operator can demonstrate that the hood or enclosure system is interlocked with the affected facility's oven recirculation air system.
- (h) Records of the measurements required in §§60.443 and 60.445 must be retained for at least two years following the date of the measurements.

§ 60.446 Test methods and procedures.

- (a) The VOC content per unit of coating solids applied and compliance with §60.422(a)(1) shall be determined by either Method 24 and the equations specified in §60.443 or by manufacturers' formulation data. In the event of any inconsistency between a Method 24 test and manufacturers' formulation data, the Method 24 test will govern. The Administrator may require an owner or operator to perform Method 24 tests during such months as he deems appropriate. For Method 24, the coating sample must be a one liter sample taken into a one liter container at a point where the sample will be representative of the coating applied to the web substrate.
- (b) Method 25 shall be used to determine the VOC concentration, in parts per million by volume, of each effluent gas stream entering and exiting the solvent destruction device or its equivalent, and each effluent gas stream emitted directly to the atmosphere. Methods 1, 2, 3, and 4 shall be used to determine the sampling location, volumetric flowrate, molecular weight, and moisture of all sampled gas streams. For Method 25, the sampling time for each of three runs must be at least 1 hour. The minimum sampling volume must be 0.003 dscm except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator.
- (c) If the owner or operator can demonstrate to the Administrator's satisfaction that testing of representative stacks yields results comparable to those that would be obtained by testing all stacks, the Administrator will approve testing of representative stacks on a case-by-case basis.

[48 FR 48375, Oct. 18, 1983, as amended at 65 FR 61761, Oct. 17, 2000]

§ 60.447 Reporting requirements.

- (a) For all affected facilities subject to compliance with §60.442, the performance test data and results

from the performance test shall be submitted to the Administrator as specified in §60.8(a) of the General Provisions (40 CFR part 60, subpart A).

(b) Following the initial performance test, the owner or operator of each affected facility shall submit quarterly reports to the Administrator of exceedances of the VOC emission limits specified in §60.442. If no such exceedances occur during a particular quarter, a report stating this shall be submitted to the Administrator semiannually.

(c) The owner or operator of each affected facility shall also submit reports at the frequency specified in §60.7(c) when the incinerator temperature drops as defined under §60.443(e). If no such periods occur, the owner or operator shall state this in the report.

(d) The requirements of this subsection remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

[48 FR 48375, Oct. 18, 1983, as amended at 55 FR 51383, Dec. 13, 1990]

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e-CFR Data is current as of April 16, 2009**Title 40: Protection of Environment****PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**[Browse Previous](#) | [Browse Next](#)**Subpart JJJJ—National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating****Source:** 67 FR 72341, Dec. 4, 2002, unless otherwise noted.**What This Subpart Covers****§ 63.3280 What is in this subpart?**

This subpart describes the actions you must take to reduce emissions of organic hazardous air pollutants (HAP) from paper and other web coating operations. This subpart establishes emission standards for web coating lines and specifies what you must do to comply if you own or operate a facility with web coating lines that is a major source of HAP. Certain requirements apply to all who are subject to this subpart; others depend on the means you use to comply with an emission standard.

§ 63.3290 Does this subpart apply to me?

The provisions of this subpart apply to each new and existing facility that is a major source of HAP, as defined in §63.2, at which web coating lines are operated.

§ 63.3300 Which of my emission sources are affected by this subpart?

The affected source subject to this subpart is the collection of all web coating lines at your facility. This includes web coating lines engaged in the coating of metal webs that are used in flexible packaging, and web coating lines engaged in the coating of fabric substrates for use in pressure sensitive tape and abrasive materials. Web coating lines specified in paragraphs (a) through (g) of this section are not part of the affected source of this subpart.

(a) Any web coating line that is stand-alone equipment under subpart KK of this part (National Emission Standards for the Printing and Publishing Industry) which the owner or operator includes in the affected source under subpart KK.

(b) Any web coating line that is a product and packaging rotogravure or wide-web flexographic press under subpart KK of this part (national emission standards for the printing and publishing industry) which is included in the affected source under subpart KK.

(c) Web coating in lithography, screenprinting, letterpress, and narrow-web flexographic printing processes.

(d) Any web coating line subject to subpart EE of this part (national emission standards for magnetic tape manufacturing operations).

(e) Any web coating line that will be subject to the national emission standards for hazardous air pollutants (NESHAP) for surface coating of metal coil currently under development.

(f) Any web coating line that will be subject to the NESHAP for the printing, coating, and dyeing of fabric and other textiles currently under development. This would include any web coating line that coats both a paper or other web substrate and a fabric or other textile substrate, except for a fabric substrate used for pressure sensitive tape and abrasive materials.

(g) Any web coating line that is defined as research or laboratory equipment in §63.3310.

[67 FR 72341, Dec. 4, 2002, as amended at 71 FR 29805, May 24, 2006]

§ 63.3310 What definitions are used in this subpart?

All terms used in this subpart that are not defined in this section have the meaning given to them in the Clean Air Act (CAA) and in subpart A of this part.

Always-controlled work station means a work station associated with a dryer from which the exhaust is delivered to a control device with no provision for the dryer exhaust to bypass the control device unless there is an interlock to interrupt and prevent continued coating during a bypass. Sampling lines for analyzers, relief valves needed for safety purposes, and periodic cycling of exhaust dampers to ensure safe operation are not considered bypass lines.

Applied means, for the purposes of this subpart, the amount of organic HAP, coating material, or coating solids (as appropriate for the emission standards in §63.3320(b)) used by the affected source during the compliance period.

As-applied means the condition of a coating at the time of application to a substrate, including any added solvent.

As-purchased means the condition of a coating as delivered to the user.

Capture efficiency means the fraction of all organic HAP emissions generated by a process that is delivered to a control device, expressed as a percentage.

Capture system means a hood, enclosed room, or other means of collecting organic HAP emissions into a closed-vent system that exhausts to a control device.

Car-seal means a seal that is placed on a device that is used to change the position of a valve or damper (e.g., from open to closed) in such a way that the position of the valve or damper cannot be changed without breaking the seal.

Coating material(s) means all inks, varnishes, adhesives, primers, solvents, reducers, and other coating materials applied to a substrate via a web coating line. Materials used to form a substrate are not considered coating materials.

Control device means a device such as a solvent recovery device or oxidizer which reduces the organic HAP in an exhaust gas by recovery or by destruction.

Control device efficiency means the ratio of organic HAP emissions recovered or destroyed by a control device to the total organic HAP emissions that are introduced into the control device, expressed as a percentage.

Day means a 24-consecutive-hour period.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a

permit; or

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during start-up, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Existing affected source means any affected source the construction or reconstruction of which is commenced on or before September 13, 2000, and has not undergone reconstruction as defined in §63.2.

Fabric means any woven, knitted, plaited, braided, felted, or non-woven material made of filaments, fibers, or yarns including thread. This term includes material made of fiberglass, natural fibers, synthetic fibers, or composite materials.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Flexible packaging means any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, labels, liners and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials.

Formulation data means data on the organic HAP mass fraction, volatile matter mass fraction, or coating solids mass fraction of a material that is generated by the manufacturer or means other than a test method specified in this subpart or an approved alternative method.

HAP means hazardous air pollutants.

HAP applied means the organic HAP content of all coating materials applied to a substrate by a web coating line at an affected source.

Intermittently-controlled work station means a work station associated with a dryer with provisions for the dryer exhaust to be delivered to or diverted from a control device through a bypass line, depending on the position of a valve or damper. Sampling lines for analyzers, relief valves needed for safety purposes, and periodic cycling of exhaust dampers to ensure safe operation are not considered bypass lines.

Metal coil means a continuous metal strip that is at least 0.15 millimeter (0.006 inch) thick which is packaged in a roll or coil prior to coating. After coating, it may or may not be rewound into a roll or coil. Metal coil does not include metal webs that are coated for use in flexible packaging.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Never-controlled work station means a work station that is not equipped with provisions by which any emissions, including those in the exhaust from any associated dryer, may be delivered to a control device.

New affected source means any affected source the construction or reconstruction of which is commenced after September 13, 2000.

Overall organic HAP control efficiency means the total efficiency of a capture and control system.

Pressure sensitive tape means a flexible backing material with a pressure-sensitive adhesive coating on one or both sides of the backing. Examples include, but are not limited to, duct/duct insulation tape and medical tape.

Research or laboratory equipment means any equipment for which the primary purpose is to conduct research and development into new processes and products where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce except in a *de minimis* manner.

Rewind or cutting station means a unit from which substrate is collected at the outlet of a web coating line.

Uncontrolled coating line means a coating line consisting of only never-controlled work stations.

Unwind or feed station means a unit from which substrate is fed to a web coating line.

Web means a continuous substrate (e.g., paper, film, foil) which is flexible enough to be wound or unwound as rolls.

Web coating line means any number of work stations, of which one or more applies a continuous layer of coating material across the entire width or any portion of the width of a web substrate, and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station.

Work station means a unit on a web coating line where coating material is deposited onto a web substrate.

Emission Standards and Compliance Dates

§ 63.3320 What emission standards must I meet?

(a) If you own or operate any affected source that is subject to the requirements of this subpart, you must comply with these requirements on and after the compliance dates as specified in §63.3330.

(b) You must limit organic HAP emissions to the level specified in paragraph (b)(1), (2), (3), or (4) of this section.

(1) No more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources, and no more than 2 percent of the organic HAP applied for each month (98 percent reduction) at new affected sources; or

(2) No more than 4 percent of the mass of coating materials applied for each month at existing affected sources, and no more than 1.6 percent of the mass of coating materials applied for each month at new affected sources; or

(3) No more than 20 percent of the mass of coating solids applied for each month at existing affected sources, and no more than 8 percent of the coating solids applied for each month at new affected sources.

(4) If you use an oxidizer to control organic HAP emissions, operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is achieved and the efficiency of the capture system is 100 percent.

(c) You must demonstrate compliance with this subpart by following the procedures in §63.3370.

§ 63.3321 What operating limits must I meet?

(a) For any web coating line or group of web coating lines for which you use add-on control devices, unless you use a solvent recovery system and conduct a liquid-liquid material balance, you must meet the operating limits specified in Table 1 to this subpart or according to paragraph (b) of this section. These operating limits apply to emission capture systems and control devices, and you must establish the operating limits during the performance test according to the requirements in §63.3360(e)(3). You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than those listed in Table 1 to this subpart or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

§ 63.3330 When must I comply?

(a) If you own or operate an existing affected source subject to the provisions of this subpart, you must comply by the compliance date. The compliance date for existing affected sources in this subpart is December 5, 2005. You must complete any performance test required in §63.3360 within the time limits specified in §63.7(a)(2).

(b) If you own or operate a new affected source subject to the provisions of this subpart, your

compliance date is immediately upon start-up of the new affected source or by December 4, 2002, whichever is later. You must complete any performance test required in §63.3360 within the time limits specified in §63.7(a)(2).

(c) If you own or operate a reconstructed affected source subject to the provisions of this subpart, your compliance date is immediately upon startup of the affected source or by December 4, 2002, whichever is later. Existing affected sources which have undergone reconstruction as defined in §63.2 are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the existing affected source has been reconstructed. Additionally, the costs of retrofitting and replacing of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs. You must complete any performance test required in §63.3360 within the time limits specified in §63.7(a)(2).

General Requirements for Compliance With the Emission Standards and for Monitoring and Performance Tests

§ 63.3340 What general requirements must I meet to comply with the standards?

Table 2 to this subpart specifies the provisions of subpart A of this part that apply if you are subject to this subpart, such as startup, shutdown, and malfunction plans (SSMP) in §63.6(e)(3) for affected sources using a control device to comply with the emission standards.

§ 63.3350 If I use a control device to comply with the emission standards, what monitoring must I do?

(a) A summary of monitoring you must do follows:

If you operate a web coating line, and have the following:	Then you must:
(1) Intermittently-controlled work stations	Record parameters related to possible exhaust flow bypass of control device and to coating use (§63.3350(c)).
(2) Solvent recovery unit	Operate continuous emission monitoring system and perform quarterly audits or determine volatile matter recovered and conduct a liquid-liquid material balance (§63.3350(d)).
(3) Control Device	Operate continuous parameter monitoring system (§63.3350(e)).
(4) Capture system	Monitor capture system operating parameter (§63.3350(f)).

(b) Following the date on which the initial performance test of a control device is completed to demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device used to comply with §63.3320. You must install and operate the monitoring equipment as specified in paragraphs (c) and (f) of this section.

(c) *Bypass and coating use monitoring.* If you own or operate web coating lines with intermittently-controlled work stations, you must monitor bypasses of the control device and the mass of each coating material applied at the work station during any such bypass. If using a control device for complying with the requirements of this subpart, you must demonstrate that any coating material applied on a never-controlled work station or an intermittently-controlled work station operated in bypass mode is allowed in your compliance demonstration according to §63.3370(n) and (o). The bypass monitoring must be conducted using at least one of the procedures in paragraphs (c)(1) through (4) of this section for each work station and associated dryer.

(1) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour as well as every time

the flow direction is changed. A flow control position indicator must be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.

(2) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve or damper is maintained in the closed position, and the exhaust stream is not diverted through the bypass line.

(3) *Valve closure continuous monitoring.* Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position when the emission source is in operation and is using a control device for compliance with the requirements of this subpart. The monitoring system must be inspected at least once every month to verify that the monitor will indicate valve position.

(4) *Automatic shutdown system.* Use an automatic shutdown system in which the web coating line is stopped when flow is diverted away from the control device to any bypass line when the control device is in operation. The automatic system must be inspected at least once every month to verify that it will detect diversions of flow and would shut down operations in the event of such a diversion.

(d) *Solvent recovery unit.* If you own or operate a solvent recovery unit to comply with §63.3320, you must meet the requirements in either paragraph (d)(1) or (2) of this section depending on how control efficiency is determined.

(1) *Continuous emission monitoring system (CEMS).* If you are demonstrating compliance with the emission standards in §63.3320 through continuous emission monitoring of a control device, you must install, calibrate, operate, and maintain the CEMS according to paragraphs (d)(1)(i) through (iii) of this section.

(i) Measure the total organic volatile matter mass flow rate at both the control device inlet and the outlet such that the reduction efficiency can be determined. Each continuous emission monitor must comply with performance specification 6, 8, or 9 of 40 CFR part 60, appendix B, as appropriate.

(ii) You must follow the quality assurance procedures in procedure 1, appendix F of 40 CFR part 60. In conducting the quarterly audits of the monitors as required by procedure 1, appendix F, you must use compounds representative of the gaseous emission stream being controlled.

(iii) You must have valid data from at least 90 percent of the hours during which the process is operated.

(2) *Liquid-liquid material balance.* If you are demonstrating compliance with the emission standards in §63.3320 through liquid-liquid material balance, you must install, calibrate, maintain, and operate according to the manufacturer's specifications a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device must be certified by the manufacturer to be accurate to within ± 2.0 percent by mass.

(e) *Continuous parameter monitoring system (CPMS).* If you are using a control device to comply with the emission standards in §63.3320, you must install, operate, and maintain each CPMS specified in paragraphs (e)(9) and (10) and (f) of this section according to the requirements in paragraphs (e)(1) through (8) of this section. You must install, operate, and maintain each CPMS specified in paragraph (c) of this section according to paragraphs (e)(5) through (7) of this section.

(1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation to have a valid hour of data.

(2) You must have valid data from at least 90 percent of the hours during which the process operated.

(3) You must determine the hourly average of all recorded readings according to paragraphs (e)(3)(i) and (ii) of this section.

(i) To calculate a valid hourly value, you must have at least three of four equally spaced data values from that hour from a continuous monitoring system (CMS) that is not out-of-control.

(ii) Provided all of the readings recorded in accordance with paragraph (e)(3) of this section clearly demonstrate continuous compliance with the standard that applies to you, then you are not required to determine the hourly average of all recorded readings.

(4) You must determine the rolling 3-hour average of all recorded readings for each operating period. To calculate the average for each 3-hour averaging period, you must have at least two of three of the hourly averages for that period using only average values that are based on valid data (i.e., not from out-of-control periods).

(5) You must record the results of each inspection, calibration, and validation check of the CPMS.

(6) At all times, you must maintain the monitoring system in proper working order including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(7) Except for monitoring malfunctions, associated repairs, or required quality assurance or control activities (including calibration checks or required zero and span adjustments), you must conduct all monitoring at all times that the unit is operating. Data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities shall not be used for purposes of calculating the emissions concentrations and percent reductions specified in §63.3370. You must use all the valid data collected during all other periods in assessing compliance of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(8) Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation, and you must notify the Administrator in accordance with §63.3400(c).

(9) *Oxidizer.* If you are using an oxidizer to comply with the emission standards, you must comply with paragraphs (e)(9)(i) through (iii) of this section.

(i) Install, calibrate, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months or the chart recorder, data logger, or temperature indicator must be replaced. You must replace the equipment whether you choose not to perform the calibration or the equipment cannot be calibrated properly.

(ii) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius, or ± 1 °Celsius, whichever is greater. The thermocouple or temperature sensor must be installed in the combustion chamber at a location in the combustion zone.

(iii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius or ± 1 degree Celsius, whichever is greater. The thermocouple or temperature sensor must be installed in the vent stream at the nearest feasible point to the inlet and outlet of the catalyst bed. Calculate the temperature rise across the catalyst.

(10) *Other types of control devices.* If you use a control device other than an oxidizer or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of an alternative monitoring method under §63.8(f).

(f) *Capture system monitoring.* If you are complying with the emission standards in §63.3320 through the use of a capture system and control device for one or more web coating lines, you must develop a site-specific monitoring plan containing the information specified in paragraphs (f)(1) and (2) of this section for these capture systems. You must monitor the capture system in accordance with paragraph (f)(3) of this section. You must make the monitoring plan available for inspection by the permitting authority upon request.

(1) The monitoring plan must:

(i) Identify the operating parameter to be monitored to ensure that the capture efficiency determined during the initial compliance test is maintained; and

(ii) Explain why this parameter is appropriate for demonstrating ongoing compliance; and

(iii) Identify the specific monitoring procedures.

(2) The monitoring plan must specify the operating parameter value or range of values that demonstrate compliance with the emission standards in §63.3320. The specified operating parameter value or range of values must represent the conditions present when the capture system is being properly operated and maintained.

(3) You must conduct all capture system monitoring in accordance with the plan.

(4) Any deviation from the operating parameter value or range of values which are monitored according to the plan will be considered a deviation from the operating limit.

(5) You must review and update the capture system monitoring plan at least annually.

§ 63.3360 What performance tests must I conduct?

(a) The performance test methods you must conduct are as follows:

If you control organic HAP on any individual web coating line or any group of web coating lines by:	You must:
(1) Limiting organic HAP or volatile matter content of coatings	Determine the organic HAP or volatile matter and coating solids content of coating materials according to procedures in §63.3360(c) and (d). If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to §63.3360(g).
(2) Using a capture and control system	Conduct a performance test for each capture and control system to determine: the destruction or removal efficiency of each control device other than solvent recovery according to §63.3360(e), and the capture efficiency of each capture system according to §63.3360(f). If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to §63.3360 (g).

(b) If you are using a control device to comply with the emission standards in §63.3320, you are not required to conduct a performance test to demonstrate compliance if one or more of the criteria in paragraphs (b)(1) through (3) of this section are met.

(1) The control device is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration and capture efficiency has been determined in accordance with the requirements of this subpart such that an overall organic HAP control efficiency can be calculated, and the continuous emission monitors are used to demonstrate continuous compliance in accordance with §63.3350; or

(2) You have met the requirements of §63.7(h) (for waiver of performance testing; or

(3) The control device is a solvent recovery system and you comply by means of a monthly liquid-liquid material balance.

(c) *Organic HAP content.* If you determine compliance with the emission standards in §63.3320 by means other than determining the overall organic HAP control efficiency of a control device, you must determine the organic HAP mass fraction of each coating material "as-purchased" by following one of the procedures in paragraphs (c)(1) through (3) of this section, and determine the organic HAP mass fraction of each coating material "as-applied" by following the procedures in paragraph (c)(4) of this

section. If the organic HAP content values are not determined using the procedures in paragraphs (c)(1) through (3) of this section, the owner or operator must submit an alternative test method for determining their values for approval by the Administrator in accordance with §63.7(f). The recovery efficiency of the test method must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

(1) *Method 311.* You may test the coating material in accordance with Method 311 of appendix A of this part. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the owner or operator. The organic HAP content must be calculated according to the criteria and procedures in paragraphs (c)(1)(i) through (iii) of this section.

(i) Include each organic HAP determined to be present at greater than or equal to 0.1 mass percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 mass percent for other organic HAP compounds.

(ii) Express the mass fraction of each organic HAP you include according to paragraph (c)(1)(i) of this section as a value truncated to four places after the decimal point (for example, 0.3791).

(iii) Calculate the total mass fraction of organic HAP in the tested material by summing the counted individual organic HAP mass fractions and truncating the result to three places after the decimal point (for example, 0.763).

(2) *Method 24.* For coatings, determine the volatile organic content as mass fraction of nonaqueous volatile matter and use it as a substitute for organic HAP using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to you.

(3) *Formulation data.* You may use formulation data to determine the organic HAP mass fraction of a coating material. Formulation data may be provided to the owner or operator by the manufacturer of the material. In the event of an inconsistency between Method 311 (appendix A of 40 CFR part 63) test data and a facility's formulation data, and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used.

(4) *As-applied organic HAP mass fraction.* If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied organic HAP mass fraction is equal to the as-purchased organic HAP mass fraction. Otherwise, the as-applied organic HAP mass fraction must be calculated using Equation 1a of §63.3370.

(d) *Volatile organic and coating solids content.* If you determine compliance with the emission standards in §63.3320 by means other than determining the overall organic HAP control efficiency of a control device and you choose to use the volatile organic content as a surrogate for the organic HAP content of coatings, you must determine the as-purchased volatile organic content and coating solids content of each coating material applied by following the procedures in paragraph (d)(1) or (2) of this section, and the as-applied volatile organic content and coating solids content of each coating material by following the procedures in paragraph (d)(3) of this section.

(1) *Method 24.* You may determine the volatile organic and coating solids mass fraction of each coating applied using Method 24 (40 CFR part 60, appendix A.) The Method 24 determination may be performed by the manufacturer of the material and the results provided to you. If these values cannot be determined using Method 24, you must submit an alternative technique for determining their values for approval by the Administrator.

(2) *Formulation data.* You may determine the volatile organic content and coating solids content of a coating material based on formulation data and may rely on volatile organic content data provided by the manufacturer of the material. In the event of any inconsistency between the formulation data and the results of Method 24 of 40 CFR part 60, appendix A, and the Method 24 results are higher, the results of Method 24 will govern.

(3) *As-applied volatile organic content and coating solids content.* If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied volatile organic content is equal to the as-purchased volatile content and the as-applied coating solids content is equal to the as-purchased coating solids content. Otherwise, the as-applied volatile organic content must be calculated using Equation 1b of §63.3370 and the as-applied coating solids content must be calculated

using Equation 2 of §63.3370.

(e) *Control device efficiency.* If you are using an add-on control device other than solvent recovery, such as an oxidizer, to comply with the emission standards in §63.3320, you must conduct a performance test to establish the destruction or removal efficiency of the control device according to the methods and procedures in paragraphs (e)(1) and (2) of this section. During the performance test, you must establish the operating limits required by §63.3321 according to paragraph (e)(3) of this section.

(1) An initial performance test to establish the destruction or removal efficiency of the control device must be conducted such that control device inlet and outlet testing is conducted simultaneously, and the data are reduced in accordance with the test methods and procedures in paragraphs (e)(1)(i) through (ix) of this section. You must conduct three test runs as specified in §63.7(e)(3), and each test run must last at least 1 hour.

(i) Method 1 or 1A of 40 CFR part 60, appendix A, must be used for sample and velocity traverses to determine sampling locations.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, must be used to determine gas volumetric flow rate.

(iii) Method 3, 3A, or 3B of 40 CFR part 60, appendix A, must be used for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]," (incorporated by reference, see §63.14).

(iv) Method 4 of 40 CFR part 60, appendix A, must be used to determine stack gas moisture.

(v) The gas volumetric flow rate, dry molecular weight, and stack gas moisture must be determined during each test run specified in paragraph (f)(1)(vii) of this section.

(vi) Method 25 or 25A of 40 CFR part 60, appendix A, must be used to determine total gaseous non-methane organic matter concentration. Use the same test method for both the inlet and outlet measurements which must be conducted simultaneously. You must submit notice of the intended test method to the Administrator for approval along with notification of the performance test required under §63.7(b). You must use Method 25A if any of the conditions described in paragraphs (e)(1)(vi)(A) through (D) of this section apply to the control device.

(A) The control device is not an oxidizer.

(B) The control device is an oxidizer but an exhaust gas volatile organic matter concentration of 50 ppmv or less is required to comply with the emission standards in §63.3320; or

(C) The control device is an oxidizer but the volatile organic matter concentration at the inlet to the control system and the required level of control are such that they result in exhaust gas volatile organic matter concentrations of 50 ppmv or less; or

(D) The control device is an oxidizer but because of the high efficiency of the control device the anticipated volatile organic matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.

(vii) Except as provided in §63.7(e)(3), each performance test must consist of three separate runs with each run conducted for at least 1 hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining volatile organic compound concentrations and mass flow rates, the average of the results of all the runs will apply.

(viii) Volatile organic matter mass flow rates must be determined for each run specified in paragraph (e)(1)(vii) of this section using Equation 1 of this section:

$$M_f = Q_{sd} C_c [12] [0.0416] [10^{-6}] \quad \text{Eq. 1}$$

Where:

M_f = Total organic volatile matter mass flow rate, kilograms (kg)/hour (h).

Q_{sd} = Volumetric flow rate of gases entering or exiting the control device, as determined according to §63.3360(e)(1)(ii), dry standard cubic meters (dscm)/h.

C_c = Concentration of organic compounds as carbon, ppmv.

12.0 = Molecular weight of carbon.

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(ix) For each run, emission control device destruction or removal efficiency must be determined using Equation 2 of this section:

$$E = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \quad \text{Eq. 2}$$

Where:

E = Organic volatile matter control efficiency of the control device, percent.

M_{fi} = Organic volatile matter mass flow rate at the inlet to the control device, kg/h.

M_{fo} = Organic volatile matter mass flow rate at the outlet of the control device, kg/h.

(x) The control device destruction or removal efficiency is determined as the average of the efficiencies determined in the test runs and calculated in Equation 2 of this section.

(2) You must record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Operations during periods of startup, shutdown, and malfunction will not constitute representative conditions for the purpose of a performance test:

(3) *Operating limits.* If you are using one or more add-on control device other than a solvent recovery system for which you conduct a liquid-liquid material balance to comply with the emission standards in §63.3320, you must establish the applicable operating limits required by §63.3321. These operating limits apply to each add-on emission control device, and you must establish the operating limits during the performance test required by paragraph (e) of this section according to the requirements in paragraphs (e)(3)(i) and (ii) of this section.

(i) *Thermal oxidizer.* If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (e)(3)(i)(A) and (B) of this section.

(A) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(B) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(ii) *Catalytic oxidizer.* If your add-on control device is a catalytic oxidizer, establish the operating limits according to paragraphs (e)(3)(ii)(A) and (B) or paragraphs (e)(3)(ii)(C) and (D) of this section.

(A) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(B) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(C) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (e)(3)(ii)(D) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(D) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (e)(3)(ii)(C) of this section. The plan must address, at a minimum, the elements specified in paragraphs (e)(3)(ii)(D)(1) through (3) of this section.

(1) Annual sampling and analysis of the catalyst activity (*i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures,

(2) Monthly inspection of the oxidizer system including the burner assembly and fuel supply lines for problems, and

(3) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must take corrective action consistent with the manufacturer's recommendations and conduct a new performance test to determine destruction efficiency in accordance with this section.

(f) *Capture efficiency.* If you demonstrate compliance by meeting the requirements of §63.3370(e), (f), (g), (h), (i)(2), (k), (n)(2) or (3), or (p), you must determine capture efficiency using the procedures in paragraph (f)(1), (2), or (3) of this section, as applicable.

(1) You may assume your capture efficiency equals 100 percent if your capture system is a permanent total enclosure (PTE). You must confirm that your capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR part 51, appendix M, and that all exhaust gases from the enclosure are delivered to a control device.

(2) You may determine capture efficiency according to the protocols for testing with temporary total enclosures that are specified in Methods 204 and 204A through F of 40 CFR part 51, appendix M. You may exclude never-controlled work stations from such capture efficiency determinations.

(3) You may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in appendix A of subpart KK of this part. You may exclude never-controlled work stations from such capture efficiency determinations.

(g) *Volatile matter retained in the coated web or otherwise not emitted to the atmosphere.* You may choose to take into account the mass of volatile matter retained in the coated web after curing or drying or otherwise not emitted to the atmosphere when determining compliance with the emission standards in §63.3320. If you choose this option, you must develop a testing protocol to determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere and submit this protocol to the Administrator for approval. You must submit this protocol with your site-specific test plan under §63.7(f). If you intend to take into account the mass of volatile matter retained in the coated web after curing or drying or otherwise not emitted to the atmosphere and demonstrate compliance according to §63.3370(c)(3), (c)(4), (c)(5), or (d), then the test protocol you submit must determine the mass of organic HAP retained in the coated web or otherwise not emitted to the atmosphere. Otherwise, compliance must be shown using the volatile organic matter content as a surrogate for the HAP content of the coatings.

(h) *Control devices in series.* If you use multiple control devices in series to comply with the emission standards in §63.3320, the performance test must include, at a minimum, the inlet to the first control device in the series, the outlet of the last control device in the series, and all intermediate streams (*e.g.*, gaseous exhaust to the atmosphere or a liquid stream from a recovery device) that are not subsequently treated by any of the control devices in the series.

Requirements for Showing Compliance

§ 63.3370 How do I demonstrate compliance with the emission standards?

(a) A summary of how you must demonstrate compliance follows:

If you choose to demonstrate compliance by:	Then you must demonstrate that:	To accomplish this:
(1) Use of "as-purchased" compliant coating materials	(i) Each coating material used at an existing affected source does not exceed 0.04 kg organic HAP per kg coating material, and each coating material used at a new affected source does not exceed 0.016 kg organic HAP per kg coating material as-purchased; or	Follow the procedures set out in §63.3370(b).
	(ii) Each coating material used at an existing affected source does not exceed 0.2 kg organic HAP per kg coating solids, and each coating material used at a new affected source does not exceed 0.08 kg organic HAP per kg coating solids as-purchased	Follow the procedures set out in §63.3370(b).
(2) Use of "as-applied" compliant coating materials	(i) Each coating material used at an existing affected source does not exceed 0.04 kg organic HAP per kg coating material, and each coating material used at a new affected source does not exceed 0.016 kg organic HAP per kg coating material as-applied; or	Follow the procedures set out in §63.3370(c)(1). Use either Equation 1a or b of §63.3370 to determine compliance with §63.3320(b)(2) in accordance with §63.3370(c)(5)(i).
	(ii) Each coating material used at an existing affected source does not exceed 0.2 kg organic HAP per kg coating solids, and each coating material used at a new affected source does not exceed 0.08 kg organic HAP per kg coating solids as-applied; or	Follow the procedures set out in §63.3370(c)(2). Use Equations 2 and 3 of §63.3370 to determine compliance with §63.3320(b)(3) in accordance with §63.3370(c)(5)(i).
	(iii) Monthly average of all coating materials used at an existing affected source does	Follow the procedures set out in §63.3370(c)(3). Use Equation 4 of §63.3370 to

	not exceed 0.04 kg organic HAP per kg coating material, and monthly average of all coating materials used at a new affected source does not exceed 0.016 kg organic HAP per kg coating material as-applied on a monthly average basis; or	determine compliance with §63.3320(b)(2) in accordance with §63.3370(c)(5)(ii).
	(iv) Monthly average of all coating materials used at an existing affected source does not exceed 0.2 kg organic HAP per kg coating solids, and monthly average of all coating materials used at a new affected source does not exceed 0.08 kg organic HAP per kg coating solids as-applied on a monthly average basis	Follow the procedures set out in §63.3370(c)(4). Use Equation 5 of §63.3370 to determine compliance with §63.3320(b)(3) in accordance with §63.3370(c)(5)(ii).
(3) Tracking total monthly organic HAP applied.	Total monthly organic HAP applied does not exceed the calculated limit based on emission limitations	Follow the procedures set out in §63.3370(d). Show that total monthly HAP applied (Equation 6 of §63.3370) is less than the calculated equivalent allowable organic HAP (Equation 13a or b of §63.3370).
(4) Use of a capture system and control device	(i) Overall organic HAP control efficiency is equal to 95 percent at an existing affected source and 98 percent at a new affected source on a monthly basis; or oxidizer outlet organic HAP concentration is no greater than 20 ppmv by compound and capture efficiency is 100 percent; or operating parameters are continuously monitored; or	Follow the procedures set out in §63.3370(e) to determine compliance with §63.3320(b)(1) according to §63.3370(i) if using a solvent recovery device, or §63.3370(j) if using a control device and CPMS, or §63.3370(k) if using an oxidizer.
	(ii) Overall organic HAP emission rate does not exceed 0.2 kg organic HAP per kg coating solids for an existing affected source or 0.08 kg organic HAP per kg coating solids for a new affected source on a monthly average as-applied basis;	Follow the procedures set out in §63.3370(f) to determine compliance with §63.3320(b)(3) according to §63.3370(i) if using a solvent recovery device, or §63.3370(k) if using an oxidizer.
	(iii) Overall organic HAP	Follow the procedures set out

	emission rate does not exceed 0.04 kg organic HAP per kg coating material for an existing affected source or 0.016 kg organic HAP per kg coating material for a new affected source on a monthly average as-applied basis; or	in §63.3370(g) to determine compliance with §63.3320(b) (2) according to §63.3370(i) if using a solvent recovery device, or §63.3370(k) if using an oxidizer.
	(iv) Overall organic HAP emission rate does not exceed the calculated limit based on emission limitations	Follow the procedures set out in §63.3370(h). Show that the monthly organic HAP emission rate is less than the calculated equivalent allowable organic HAP emission rate (Equation 13a or b of §63.3370). Calculate the monthly organic HAP emission rate according to §63.3370(i) if using a solvent recovery device, or §63.3370(k) if using an oxidizer.
(5) Use of multiple capture and/or control devices	(i) Overall organic HAP control efficiency is equal to 95 percent at an existing affected source and 98 percent at a new affected source on a monthly basis; or	Follow the procedures set out in §63.3370(e) to determine compliance with §63.3320(b) (1) according to §63.3370(e) (1) or (2).
	(ii) Average equivalent organic HAP emission rate does not exceed 0.2 kg organic HAP per kg coating solids for an existing affected source or 0.08 kg organic HAP per kg coating solids for a new affected source on a monthly average as-applied basis; or	Follow the procedures set out in §63.3370(f) to determine compliance with §63.3320(b) (3) according to §63.3370(n).
	(iii) Average equivalent organic HAP emission rate does not exceed 0.04 kg organic HAP per kg coating material for an existing affected source or 0.016 kg organic HAP per kg coating material for a new affected source on a monthly average as-applied basis; or	Follow the procedures set out in §63.3370(g) to determine compliance with §63.3320(b) (2) according to §63.3370(n).
	(iv) Average equivalent organic HAP emission rate does not exceed the calculated limit based on emission limitations	Follow the procedures set out in §63.3370(h). Show that the monthly organic HAP emission rate is less than the calculated equivalent

		allowable organic HAP emission rate (Equation 13a or b of §63.3370) according to §63.3370(n).
(6) Use of a combination of compliant coatings and control devices	(i) Average equivalent organic HAP emission rate does not exceed 0.2 kg organic HAP per kg coating solids for an existing affected source or 0.08 kg organic HAP per kg coating solids for a new affected source on a monthly average as-applied basis; or	Follow the procedures set out in §63.3370(f) to determine compliance with §63.3320(b)(3) according to §63.3370(n).
	(ii) Average equivalent organic HAP emission rate does not exceed 0.04 kg organic HAP per kg coating material for an existing affected source or 0.016 kg organic HAP per kg coating material for a new affected source on a monthly average as-applied basis; or	Follow the procedures set out in §63.3370(g) to determine compliance with §63.3320(b)(2) according to §63.3370(n).
	(iii) Average equivalent organic HAP emission rate does not exceed the calculated limit based on emission limitations	Follow the procedures set out in §63.3370(h). Show that the monthly organic HAP emission rate is less than the calculated equivalent allowable organic HAP emission rate (Equation 13a or b of §63.3370) according to §63.3370(n).

(b) *As-purchased "compliant" coating materials.* (1) If you comply by using coating materials that individually meet the emission standards in §63.3320(b)(2) or (3), you must demonstrate that each coating material applied during the month at an existing affected source contains no more than 0.04 mass fraction organic HAP or 0.2 kg organic HAP per kg coating solids, and that each coating material applied during the month at a new affected source contains no more than 0.016 mass fraction organic HAP or 0.08 kg organic HAP per kg coating solids on an as-purchased basis as determined in accordance with §63.3360(c).

(2) You are in compliance with emission standards in §63.3320(b)(2) and (3) if each coating material applied at an existing affected source is applied as-purchased and contains no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg coating solids, and each coating material applied at a new affected source is applied as-purchased and contains no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg coating solids.

(c) *As-applied "compliant" coating materials.* If you comply by using coating materials that meet the emission standards in §63.3320(b)(2) or (3) as-applied, you must demonstrate compliance by following one of the procedures in paragraphs (c)(1) through (4) of this section. Compliance is determined in accordance with paragraph (c)(5) of this section.

(1) *Each coating material as-applied meets the mass fraction of coating material standard (§63.3320(b)(2)).* You must demonstrate that each coating material applied at an existing affected source during the month contains no more than 0.04 kg organic HAP per kg coating material applied, and each coating material applied at a new affected source contains no more than 0.016 kg organic HAP per kg coating material applied as determined in accordance with paragraphs (c)(1)(i) and (ii) of this section. You must

calculate the as-applied organic HAP content of as-purchased coating materials which are reduced, thinned, or diluted prior to application.

(i) Determine the organic HAP content or volatile organic content of each coating material applied on an as-purchased basis in accordance with §63.3360(c).

(ii) Calculate the as-applied organic HAP content of each coating material using Equation 1a of this section:

$$C_{ahi} = \frac{\left(C_{hi}M_i + \sum_{j=1}^q C_{hij}M_j \right)}{M_i + \sum_{j=1}^q M_j} \quad \text{Eq. 1a}$$

Where:

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.

C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

or calculate the as-applied volatile organic content of each coating material using Equation 1b of this section:

$$C_{avi} = \frac{\left(C_{vi}M_i + \sum_{j=1}^q C_{vij}M_j \right)}{M_i + \sum_{j=1}^q M_j} \quad \text{Eq. 1b}$$

Where:

C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.

C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(2) Each coating material as-applied meets the mass fraction of coating solids standard (§63.3320(b)(3)). You must demonstrate that each coating material applied at an existing affected source contains no more than 0.20 kg of organic HAP per kg of coating solids applied and each coating material applied at a new affected source contains no more than 0.08 kg of organic HAP per kg of coating solids applied. You must demonstrate compliance in accordance with paragraphs (c)(2)(i) and (ii) of this section.

(i) Determine the as-applied coating solids content of each coating material following the procedure in §63.3360(d). You must calculate the as-applied coating solids content of coating materials which are reduced, thinned, or diluted prior to application, using Equation 2 of this section:

$$C_{asi} = \frac{\left(C_{si}M_i + \sum_{j=1}^q C_{sij}M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 2}$$

Where:

C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass-fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(ii) Calculate the as-applied organic HAP to coating solids ratio using Equation 3 of this section:

$$H_{si} = \frac{C_{ahi}}{C_{asi}} \quad \text{Eq. 3}$$

Where:

H_{si} = As-applied, organic HAP to coating solids ratio of coating material, i.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.

C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

(3) Monthly average organic HAP content of all coating materials as-applied is less than the mass percent limit (§63.3320(b)(2)). Demonstrate that the monthly average as-applied organic HAP content of all coating materials applied at an existing affected source is less than 0.04 kg organic HAP per kg of coating material applied, and all coating materials applied at a new affected source are less than 0.016 kg organic HAP per kg of coating material applied, as determined by Equation 4 of this section:

$$H_L = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_j - M_{vret}}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_j} \quad \text{Eq. 4}$$

Where:

H_L = Monthly average, as-applied, organic HAP content of all coating materials applied, expressed as kg organic HAP per kg of coating material applied, kg/kg.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §63.3370.

(4) *Monthly average organic HAP content of all coating materials as-applied is less than the mass fraction of coating solids limit (§63.3320(b)(3)).* Demonstrate that the monthly average as-applied organic HAP content on the basis of coating solids applied of all coating materials applied at an existing affected source is less than 0.20 kg organic HAP per kg coating solids applied, and all coating materials applied at a new affected source are less than 0.08 kg organic HAP per kg coating solids applied, as determined by Equation 5 of this section:

$$H_s = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_j - M_{vret}}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_j} \quad \text{Eq. 5}$$

Where:

H_s = Monthly average, as-applied, organic HAP to coating solids ratio, kg organic HAP/kg coating solids applied.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §63.3370.

C_{si} = Coating solids content of coating material, i , expressed as a mass fraction, kg/kg.

C_{sij} = Coating solids content of material, j , added to as-purchased coating material, i , expressed as a mass-fraction, kg/kg.

(5) The affected source is in compliance with emission standards in §63.3320(b)(2) or (3) if:

(i) The organic HAP content of each coating material as-applied at an existing affected source is no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg coating solids, and the organic HAP content of each coating material as-applied at a new affected source contains no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg coating solids; or

(ii) The monthly average organic HAP content of all as-applied coating materials at an existing affected source are no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg coating solids, and the monthly average organic HAP content of all as-applied coating materials at a new affected source is no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg coating solids.

(d) *Monthly allowable organic HAP applied.* Demonstrate that the total monthly organic HAP applied as determined by Equation 6 of this section is less than the calculated equivalent allowable organic HAP as determined by Equation 13a or b in paragraph (f) of this section:

$$H_m = \sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_j - M_{\text{vret}} \quad \text{Eq. 6}$$

Where:

H_m = Total monthly organic HAP applied, kg.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §63.3370.

(e) *Capture and control to reduce emissions to no more than allowable limit (§63.3320(b)(1)).* Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent at an existing affected source and at least 98 percent at a new affected source for each month, or operate a capture system and oxidizer so that an outlet organic HAP concentration of no greater than 20 ppmv by compound on a dry basis is achieved as long as the capture efficiency is 100 percent as detailed in §63.3320(b)(4). Unless one of the cases described in paragraph (e)(1), (2), or (3) of this section applies to the affected source, you must either demonstrate compliance in accordance with the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device, or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer or demonstrate compliance for a web coating line by operating each capture system and each control device and continuous parameter monitoring according to the procedures in paragraph (j) of this section.

(1) If the affected source has only always-controlled work stations and operates more than one capture system or more than one control device, you must demonstrate compliance in accordance with the provisions of either paragraph (n) or (p) of this section.

(2) If the affected source operates one or more never-controlled work stations or one or more intermittently-controlled work stations, you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section.

(3) An alternative method of demonstrating compliance with §63.3320(b)(1) is the installation of a PTE around the web coating line that achieves 100 percent capture efficiency and ventilation of all organic HAP emissions from the total enclosure to an oxidizer with an outlet organic HAP concentration of no greater than 20 ppmv by compound on a dry basis. If this method is selected, you must demonstrate compliance by following the procedures in paragraphs (e)(3)(i) and (ii) of this section. Compliance is determined according to paragraph (e)(3)(iii) of this section.

(i) Demonstrate that a total enclosure is installed. An enclosure that meets the requirements in §63.3360 (f)(1) will be considered a total enclosure.

(ii) Determine the organic HAP concentration at the outlet of your total enclosure using the procedures in paragraph (e)(3)(ii)(A) or (B) of this section.

(A) Determine the control device efficiency using Equation 2 of §63.3360 and the applicable test methods and procedures specified in §63.3360(e).

(B) Use a CEMS to determine the organic HAP emission rate according to paragraphs (i)(2)(i) through (x) of this section.

(iii) You are in compliance if the installation of a total enclosure is demonstrated and the organic HAP concentration at the outlet of the incinerator is demonstrated to be no greater than 20 ppmv by compound on a dry basis.

(f) *Capture and control to achieve mass fraction of coating solids applied limit (§63.3320(b)(3)).* Operate a capture system and control device and limit the organic HAP emission rate from an existing affected source to no more than 0.20 kg organic HAP emitted per kg coating solids applied, and from a new affected source to no more than 0.08 kg organic HAP emitted per kg coating solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section. Otherwise, you must demonstrate compliance following the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer.

(g) *Capture and control to achieve mass fraction limit (§63.3320(b)(2)).* Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg coating material applied at an existing affected source, and no more than 0.016 kg organic HAP

emitted per kg coating material applied at a new affected source as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations; then you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section. Otherwise, you must demonstrate compliance following the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer.

(h) *Capture and control to achieve allowable emission rate.* Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (l) of this section. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section. Otherwise, the owner or operator must demonstrate compliance following the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer.

(i) *Solvent recovery device compliance demonstration.* If you use a solvent recovery device to control emissions, you must show compliance by following the procedures in either paragraph (i)(1) or (2) of this section:

(1) *Liquid-liquid material balance.* Perform a monthly liquid-liquid material balance as specified in paragraphs (i)(1)(i) through (v) of this section and use the applicable equations in paragraphs (i)(1)(vi) through (ix) of this section to convert the data to units of the selected compliance option in paragraphs (e) through (h) of this section. Compliance is determined in accordance with paragraph (i)(1)(x) of this section.

(i) Determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common solvent recovery device during the month.

(ii) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as-applied during the month following the procedure in §63.3360(c).

(iii) Determine the volatile organic content of each coating material as-applied during the month following the procedure in §63.3360(d).

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, determine the coating solids content of each coating material applied during the month following the procedure in §63.3360(d).

(v) Determine and monitor the amount of volatile organic matter recovered for the month according to the procedures in §63.3350(d).

(vi) *Recovery efficiency.* Calculate the volatile organic matter collection and recovery efficiency using Equation 7 of this section:

$$R_v = \frac{M_{vr} + M_{vret}}{\sum_{i=1}^p C_{vi} M_i + \sum_{j=1}^q C_{vj} M_j} \times 100 \quad \text{Eq. 7}$$

Where:

R_v = Organic volatile matter collection and recovery efficiency, percent.

M_{vr} = Mass of volatile matter recovered in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or

otherwise not emitted to the atmosphere for the compliance demonstration procedures in §63.3370.

p = Number of different coating materials applied in a month.

C_{vi} = Volatile organic content of coating material, i , expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

(vii) *Organic HAP emitted.* Calculate the organic HAP emitted during the month using Equation 8 of this section:

$$H_e = \left[1 - \frac{R_v}{100} \right] \left[\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret} \right] \quad \text{Eq. 8}$$

Where:

H_e = Total monthly organic HAP emitted, kg.

R_v = Organic volatile matter collection and recovery efficiency, percent.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §63.3370.

(viii) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied using Equation 9 of this section:

$$L = \frac{H_e}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij}} \quad \text{Eq. 9}$$

Where:

L = Mass organic HAP emitted per mass of coating solids applied, kg/kg.

H_e = Total monthly organic HAP emitted, kg.

p = Number of different coating materials applied in a month.

C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass-fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(ix) *Organic HAP emission rate based on coating materials applied.* Calculate the organic HAP emission rate based on coating material applied using Equation 10 of this section:

$$S = \frac{H_e}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 10}$$

Where:

S = Mass organic HAP emitted per mass of material applied, kg/kg.

H_e = Total monthly organic HAP emitted, kg.

p = Number of different coating materials applied in a month.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(x) You are in compliance with the emission standards in §63.3320(b) if:

(A) The volatile organic matter collection and recovery efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(B) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(C) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(D) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (I) of this section.

(2) *Continuous emission monitoring of capture system and control device performance.* Demonstrate initial compliance through a performance test on capture efficiency and continuing compliance through continuous emission monitors and continuous monitoring of capture system operating parameters following the procedures in paragraphs (i)(2)(i) through (vii) of this section. Use the applicable equations specified in paragraphs (i)(2)(viii) through (x) of this section to convert the monitoring and other data into units of the selected compliance option in paragraphs (e) through (h) of this section. Compliance is determined in accordance with paragraph (i)(2)(xi) of this section.

(i) *Control device efficiency.* Continuously monitor the gas stream entering and exiting the control device to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter and the volumetric flow rate in cubic meters per second such that the total organic volatile matter mass flow rate in grams per second can be calculated) such that the control device efficiency of the control device can be calculated for each month using Equation 2 of §63.3360.

(ii) *Capture efficiency monitoring.* Whenever a web coating line is operated, continuously monitor the operating parameters established in accordance with §63.3350(f) to ensure capture efficiency.

(iii) Determine the percent capture efficiency in accordance with §63.3360(f).

(iv) *Control efficiency.* Calculate the overall organic HAP control efficiency achieved for each month using Equation 11 of this section:

$$R = \frac{(E)(CE)}{100} \quad \text{Eq. 11}$$

Where:

R = Overall organic HAP control efficiency, percent.

E = Organic volatile matter control efficiency of the control device, percent.

CE = Organic volatile matter capture efficiency of the capture system, percent.

(v) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating materials applied, or emission of less than the calculated allowable organic HAP, determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common control device during the month.

(vi) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as-applied during the month following the procedure in §63.3360(c).

(vii) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, determine the coating solids content of each coating material as-applied during the month following the procedure in §63.3360(d).

(viii) *Organic HAP emitted.* Calculate the organic HAP emitted during the month for each month using Equation 12 of this section:

$$H_e = (1 - R) \left(\sum_{i=1}^P C_{shi} M_i \right) - M_{\text{wrt}} \quad \text{Eq. 12}$$

Where:

H_e = Total monthly organic HAP emitted, kg.

R = Overall organic HAP control efficiency, percent.

p = Number of different coating materials applied in a month.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i , expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

(ix) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied using Equation 9 of this section.

(x) *Organic HAP emission rate based on coating materials applied.* Calculate the organic HAP emission rate based on coating material applied using Equation 10 of this section.

(xi) *Compare actual performance to the performance required by compliance option.* The affected source is in compliance with the emission standards in §63.3320(b) for each month if the capture system is operated such that the average capture system operating parameter is greater than or less than (as appropriate) the operating parameter value established in accordance with §63.3350(f); and

(A) The organic volatile matter collection and recovery efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(B) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(C) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(D) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (l) of this section.

(j) *Capture and control system compliance demonstration procedures using a CPMS.* If you use an add-on control device, you must demonstrate initial compliance for each capture system and each control device through performance tests and demonstrate continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in paragraphs (j)(1) through (3) of this section. Compliance is determined in accordance with paragraph (j)(4) of this section.

(1) Determine the control device destruction or removal efficiency using the applicable test methods and procedures in §63.3360(e).

(2) Determine the emission capture efficiency in accordance with §63.3360(f).

(3) Whenever a web coating line is operated, continuously monitor the operating parameters established according to §63.3350(e) and (f).

(4) You are in compliance with the emission standards in §63.3320(b) if the control device is operated such that the average operating parameter value is greater than or less than (as appropriate) the operating parameter value established in accordance with §63.3360(e) for each 3-hour period, and the

capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.3350(f); and

(i) The overall organic HAP control efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(ii) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(iv) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (l) of this section.

(k) *Oxidizer compliance demonstration procedures.* If you use an oxidizer to control emissions, you must show compliance by following the procedures in paragraph (k)(1) of this section. Use the applicable equations specified in paragraph (k)(2) of this section to convert the monitoring and other data into units of the selected compliance option in paragraph (e) through (h) of this section. Compliance is determined in accordance with paragraph (k)(3) of this section.

(1) Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in paragraphs (k)(1)(i) through (vi) of this section:

(i) Determine the oxidizer destruction efficiency using the procedure in §63.3360(e).

(ii) Determine the capture system capture efficiency in accordance with §63.3360(f).

(iii) *Capture and control efficiency monitoring.* Whenever a web coating line is operated, continuously monitor the operating parameters established in accordance with §63.3350(e) and (f) to ensure capture and control efficiency.

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating materials applied, or emission of less than the calculated allowable organic HAP, determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common oxidizer during the month.

(v) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as applied during the month following the procedure in §63.3360(c).

(vi) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, determine the coating solids content of each coating material applied during the month following the procedure in §63.3360(d).

(2) Convert the information obtained under paragraph (p)(1) of this section into the units of the selected compliance option using the calculation procedures specified in paragraphs (k)(2)(i) through (iv) of this section.

(l) *Control efficiency.* Calculate the overall organic HAP control efficiency achieved using Equation 11 of this section.

(ii) *Organic HAP emitted.* Calculate the organic HAP emitted during the month using Equation 12 of this section.

(iii) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied for each month using Equation 9 of this section.

(iv) *Organic HAP based on coating materials applied.* Calculate the organic HAP emission rate based on coating material applied using Equation 10 of this section.

(3) You are in compliance with the emission standards in §63.3320(b) if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with §63.3360(e) for each 3-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.3350(f); and

(i) The overall organic HAP control efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(ii) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(iv) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (l) of this section.

(l) *Monthly allowable organic HAP emissions.* This paragraph provides the procedures and calculations for determining monthly allowable organic HAP emissions for use in demonstrating compliance in accordance with paragraph (d), (h), (i)(1)(x)(D), (i)(2)(xi)(D), or (k)(3)(iv) of this section. You will need to determine the amount of coating material applied at greater than or equal to 20 mass percent coating solids and the amount of coating material applied at less than 20 mass percent coating solids. The allowable organic HAP limit is then calculated based on coating material applied at greater than or equal to 20 mass percent coating solids complying with 0.2 kg organic HAP per kg coating solids at an existing affected source or 0.08 kg organic HAP per kg coating solids at a new affected source, and coating material applied at less than 20 mass percent coating solids complying with 4 mass percent organic HAP at an existing affected source and 1.6 mass-percent organic HAP at a new affected source as follows:

(1) Determine the as-purchased mass of each coating material applied each month.

(2) Determine the as-purchased coating solids content of each coating material applied each month in accordance with §63.3360(d)(1).

(3) Determine the as-purchased mass fraction of each coating material which was applied at 20 mass percent or greater coating solids content on an as-applied basis.

(4) Determine the total mass of each solvent, diluent, thinner, or reducer added to coating materials which were applied at less than 20 mass percent coating solids content on an as-applied basis each month.

(5) Calculate the monthly allowable organic HAP emissions using Equation 13a of this section for an existing affected source:

$$H_a = 0.20 \left[\sum_{i=1}^p M_i G_i C_a \right] + 0.04 \left[\sum_{i=1}^p M_i (1 - G_i) + \sum_{j=1}^q M_{L_j} \right] \quad \text{Eq. 13a}$$

Where:

H_a = Monthly allowable organic HAP emissions, kg.

p = Number of different coating materials applied in a month.

M_i = mass of as-purchased coating material, i , applied in a month, kg.

G_i = Mass fraction of each coating material, i , which was applied at 20 mass percent or greater coating solids content, on an as-applied basis, kg/kg.

C_{si} = Coating solids content of coating material, i , expressed as a mass fraction, kg/kg.

q = Number of different materials added to the coating material.

M_{Lj} = Mass of non-coating-solids-containing coating material, j , added to coating-solids-containing coating materials which were applied at less than 20 mass percent coating solids content, on an as-applied basis, in a month, kg.

or Equation 13b of this section for a new affected source:

$$H_a = 0.08 \left[\sum_{i=1}^p M_i G_i C_{si} \right] + 0.016 \left[\sum_{i=1}^p M_i (1 - G_i) + \sum_{j=1}^q M_{Lj} \right] \quad \text{Eq. 13b}$$

Where:

H_a = Monthly allowable organic HAP emissions, kg.

p = Number of different coating materials applied in a month.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

G_i = Mass fraction of each coating material, i , which was applied at 20 mass percent or greater coating solids content, on an as-applied basis, kg/kg.

C_{si} = Coating solids content of coating material, i , expressed as a mass fraction, kg/kg.

q = Number of different materials added to the coating material.

M_{Lj} = Mass of non-coating-solids-containing coating material, j , added to coating-solids-containing coating materials which were applied at less than 20 mass percent coating solids content, on an as-applied basis, in a month, kg.

(m) [Reserved]

(n) *Combinations of capture and control.* If you operate more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, you must calculate organic HAP emissions according to the procedures in paragraphs (n)(1) through (4) of this section, and use the calculation procedures specified in paragraph (n)(5) of this section to convert the monitoring and other data into units of the selected control option in paragraphs (e) through (h) of this section. Use the procedures specified in paragraph (n)(6) of this section to demonstrate compliance.

(1) *Solvent recovery system using liquid-liquid material balance compliance demonstration.* If you choose to comply by means of a liquid-liquid material balance for each solvent recovery system used to control one or more web coating lines, you must determine the organic HAP emissions for those web coating lines controlled by that solvent recovery system either:

(i) In accordance with paragraphs (i)(1)(i) through (iii) and (v) through (vii) of this section, if the web coating lines controlled by that solvent recovery system have only always-controlled work stations; or

(ii) In accordance with paragraphs (i)(1)(ii), (iii), (v), and (vi) and (o) of this section, if the web coating lines controlled by that solvent recovery system have one or more never-controlled or intermittently-controlled work stations.

(2) *Solvent recovery system using performance test compliance demonstration and CEMS.* To demonstrate compliance through an initial test of capture efficiency, continuous monitoring of a capture system operating parameter, and a CEMS on each solvent recovery system used to control one or more web coating lines, you must:

(i) For each capture system delivering emissions to that solvent recovery system, monitor the operating parameter established in accordance with §63.3350(f) to ensure capture system efficiency; and

(ii) Determine the organic HAP emissions for those web coating lines served by each capture system delivering emissions to that solvent recovery system either:

(A) In accordance with paragraphs (i)(2)(i) through (iii), (v), (vi), and (viii) of this section, if the web coating lines served by that capture and control system have only always-controlled work stations; or

(B) In accordance with paragraphs (i)(2)(i) through (iii), (vi), and (o) of this section, if the web coating lines served by that capture and control system have one or more never-controlled or intermittently-controlled work stations.

(3) *Oxidizer.* To demonstrate compliance through performance tests of capture efficiency and control device efficiency, continuous monitoring of capture system, and CPMS for control device operating parameters for each oxidizer used to control emissions from one or more web coating lines, you must:

(i) Monitor the operating parameter in accordance with §63.3350(e) to ensure control device efficiency; and

(ii) For each capture system delivering emissions to that oxidizer, monitor the operating parameter established in accordance with §63.3350(f) to ensure capture efficiency; and

(iii) Determine the organic HAP emissions for those web coating lines served by each capture system delivering emissions to that oxidizer either:

(A) In accordance with paragraphs (k)(1)(i) through (vi) of this section, if the web coating lines served by that capture and control system have only always-controlled work stations; or

(B) In accordance with paragraphs (k)(1)(i) through (iii), (v), and (o) of this section, if the web coating lines served by that capture and control system have one or more never-controlled or intermittently-controlled work stations.

(4) *Uncontrolled coating lines.* If you own or operate one or more uncontrolled web coating lines, you must determine the organic HAP applied on those web coating lines using Equation 6 of this section. The organic HAP emitted from an uncontrolled web coating line is equal to the organic HAP applied on that web coating line.

(5) Convert the information obtained under paragraphs (n)(1) through (4) of this section into the units of the selected compliance option using the calculation procedures specified in paragraphs (n)(5)(i) through (iv) of this section.

(i) *Organic HAP emitted.* Calculate the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (n)(1), (2)(ii), (3)(iii), and (4) of this section.

(ii) *Coating solids applied.* If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, the owner or operator must determine the coating solids content of each coating material applied during the month following the procedure in §63.3360(d).

(iii) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied for each month using Equation 9 of this section.

(iv) *Organic HAP based on materials applied.* Calculate the organic HAP emission rate based on material applied using Equation 10 of this section.

(6) *Compliance.* The affected source is in compliance with the emission standards in §63.3320(b) for the month if all operating parameters required to be monitored under paragraphs (n)(1) through (3) of this section were maintained at the values established under §§63.3350 and 63.3360; and

(i) The total mass of organic HAP emitted by the affected source based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(ii) The total mass of organic HAP emitted by the affected source based on material applied is no more than 0.04 kg organic HAP per kg material applied at an existing affected source and no more than 0.016 kg organic HAP per kg material applied at a new affected source; or

(iii) The total mass of organic HAP emitted by the affected source during the month is less than the calculated allowable organic HAP as determined using paragraph (i) of this section; or

(iv) The total mass of organic HAP emitted by the affected source was not more than 5 percent of the total mass of organic HAP applied for the month at an existing affected source and no more than 2 percent of the total mass of organic HAP applied for the month at a new affected source. The total mass of organic HAP applied by the affected source in the month must be determined using Equation 6 of this section.

(o) *Intermittently-controlled and never-controlled work stations.* If you have been expressly referenced to this paragraph by paragraphs (n)(1)(ii), (n)(2)(ii)(B), or (n)(3)(iii)(B) of this section for calculation procedures to determine organic HAP emissions for your intermittently-controlled and never-controlled work stations, you must:

(1) Determine the sum of the mass of all coating materials as-applied on intermittently-controlled work stations operating in bypass mode and the mass of all coating materials as-applied on never-controlled work stations during the month.

(2) Determine the sum of the mass of all coating materials as-applied on intermittently-controlled work stations operating in a controlled mode and the mass of all coating materials applied on always-controlled work stations during the month.

(3) *Liquid-liquid material balance compliance demonstration.* For each web coating line or group of web coating lines for which you use the provisions of paragraph (n)(1)(ii) of this section, you must calculate the organic HAP emitted during the month using Equation 14 of this section:

$$H_e = \left[\sum_{i=1}^p M_{ci} C_{ahi} \right] \left[1 - \frac{R_v}{100} \right] + \left[\sum_{i=1}^p M_{Bi} C_{ahi} \right] - M_{vret} \quad \text{Eq. 14}$$

Where:

H_e = Total monthly organic HAP emitted, kg.

p = Number of different coating materials applied in a month.

M_{ci} = Sum of the mass of coating material, i , as-applied on intermittently-controlled work stations operating in controlled mode and the mass of coating material, i , as-applied on always-controlled work stations, in a month, kg.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i , expressed as a mass fraction, kg/kg.

R_v = Organic volatile matter collection and recovery efficiency, percent.

M_{Bi} = Sum of the mass of coating material, i , as-applied on intermittently-controlled work stations operating in bypass mode and the mass of coating material, i , as-applied on never-controlled work stations, in a month, kg.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i , expressed as a mass fraction, kg/kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this

section.

(4) *Performance test to determine capture efficiency and control device efficiency.* For each web coating line or group of web coating lines for which you use the provisions of paragraph (n)(2)(ii)(B) or (n)(3)(iii)(B) of this section, you must calculate the organic HAP emitted during the month using Equation 15 of this section:

$$H_e = \left[\sum_{i=1}^p M_{ci} C_{ahi} \right] \left[1 - \frac{R}{100} \right] + \left[\sum_{i=1}^p M_{Bi} C_{ahi} \right] - M_{vret} \quad \text{Eq. 15}$$

Where:

H_e = Total monthly organic HAP emitted, kg.

p = Number of different coating materials applied in a month.

M_{ci} = Sum of the mass of coating material, i , as-applied on intermittently-controlled work stations operating in controlled mode and the mass of coating material, i , as-applied on always-controlled work stations, in a month, kg.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i , expressed as a mass fraction, kg/kg.

R = Overall organic HAP control efficiency, percent.

M_{Bi} = Sum of the mass of coating material, i , as-applied on intermittently-controlled work stations operating in bypass mode and the mass of coating material, i , as-applied on never-controlled work stations, in a month, kg.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i , expressed as a mass fraction, kg/kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

(p) *Always-controlled work stations with more than one capture and control system.* If you operate more than one capture system or more than one control device and only have always-controlled work stations, then you are in compliance with the emission standards in §63.3320(b)(1) for the month if for each web coating line or group of web coating lines controlled by a common control device:

(1) The volatile matter collection and recovery efficiency as determined by paragraphs (i)(1)(i), (iii), (v), and (vi) of this section is at least 95 percent at an existing affected source and at least 98 percent at a new affected source; or

(2) The overall organic HAP control efficiency as determined by paragraphs (i)(2)(i) through (iv) of this section for each web coating line or group of web coating lines served by that control device and a common capture system is at least 95 percent at an existing affected source and at least 98 percent at a new affected source; or

(3) The overall organic HAP control efficiency as determined by paragraphs (k)(1)(i) through (iii) and (k)(2)(i) of this section for each web coating line or group of web coating lines served by that control device and a common capture system is at least 95 percent at an existing affected source and at least 98 percent at a new affected source.

Notifications, Reports, and Records

§ 63.3400 What notifications and reports must I submit?

(a) Each owner or operator of an affected source subject to this subpart must submit the reports specified in paragraphs (b) through (g) of this section to the Administrator:

(b) You must submit an initial notification as required by §63.9(b).

(1) Initial notification for existing affected sources must be submitted no later than 1 year before the compliance date specified in §63.3330(a).

(2) Initial notification for new and reconstructed affected sources must be submitted as required by §63.9(b).

(3) For the purpose of this subpart, a title V or part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b) and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA to implement and enforce this subpart.

(4) If you are using a permit application in lieu of an initial notification in accordance with paragraph (b) (3) of this section, the permit application must be submitted by the same due date specified for the initial notification.

(c) You must submit a semiannual compliance report according to paragraphs (c)(1) and (2) of this section.

(1) Compliance report dates.

(i) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.3330 and ending on June 30 or December 31, whichever date is the first date following the end of the calendar half immediately following the compliance date that is specified for your affected source in §63.3330.

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the calendar half immediately following the compliance date that is specified for your affected source in §63.3330.

(iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(v) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and the permitting authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (c)(1)(i) through (iv) of this section.

(2) The compliance report must contain the information in paragraphs (c)(2)(i) through (vi) of this section:

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature certifying the accuracy of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) If there are no deviations from any emission limitations (emission limit or operating limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period, and that no CMS was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(v) For each deviation from an emission limitation (emission limit or operating limit) that applies to you

and that occurs at an affected source where you are not using a CEMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(2)(i) through (iii) of this section, and:

(A) The total operating time of each affected source during the reporting period.

(B) Information on the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.

(C) Information on the number, duration, and cause for CPMS downtime incidents, if applicable, other than downtime associated with zero and span and other calibration checks.

(vi) For each deviation from an emission limit occurring at an affected source where you are using a CEMS to comply with the emission limit in this subpart, you must include the information in paragraphs (c)(2)(i) through (iii) and (vi)(A) through (J) of this section.

(A) The date and time that each malfunction started and stopped.

(B) The date and time that each CEMS and CPMS, if applicable, was inoperative except for zero (low-level) and high-level checks.

(C) The date and time that each CEMS and CPMS, if applicable, was out-of-control, including the information in §63.8(c)(8).

(D) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(E) A summary of the total duration (in hours) of each deviation during the reporting period and the total duration of each deviation as a percent of the total source operating time during that reporting period.

(F) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(G) A summary of the total duration (in hours) of CEMS and CPMS downtime during the reporting period and the total duration of CEMS and CPMS downtime as a percent of the total source operating time during that reporting period.

(H) A breakdown of the total duration of CEMS and CPMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(I) The date of the latest CEMS and CPMS certification or audit.

(J) A description of any changes in CEMS, CPMS, or controls since the last reporting period.

(d) You must submit a Notification of Performance Tests as specified in §§63.7 and 63.9(e) if you are complying with the emission standard using a control device and you are required to conduct a performance test of the control device. This notification and the site-specific test plan required under §63.7(c)(2) must identify the operating parameters to be monitored to ensure that the capture efficiency of the capture system and the control efficiency of the control device determined during the performance test are maintained. Unless EPA objects to the parameter or requests changes, you may consider the parameter approved.

(e) You must submit a Notification of Compliance Status as specified in §63.9(h).

(f) You must submit performance test reports as specified in §63.10(d)(2) if you are using a control device to comply with the emission standard and you have not obtained a waiver from the performance test requirement or you are not exempted from this requirement by §63.3360(b). The performance test reports must be submitted as part of the notification of compliance status required in §63.3400(e).

(g) You must submit startup, shutdown, and malfunction reports as specified in §63.10(d)(5), except that the provisions in subpart A of this part pertaining to startups, shutdowns, and malfunctions do not apply

unless a control device is used to comply with this subpart.

(1) If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not consistent with the procedures specified in the affected source's SSMP required by §63.6(e)(3), the owner or operator must state such information in the report. The startup, shutdown, or malfunction report must consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy and must be submitted to the Administrator.

(2) Separate startup, shutdown, and malfunction reports are not required if the information is included in the report specified in paragraph (c)(2)(vi) of this section.

§ 63.3410 What records must I keep?

(a) Each owner or operator of an affected source subject to this subpart must maintain the records specified in paragraphs (a)(1) and (2) of this section on a monthly basis in accordance with the requirements of §63.10(b)(1):

(1) Records specified in §63.10(b)(2) of all measurements needed to demonstrate compliance with this standard, including:

(i) Continuous emission monitor data in accordance with the requirements of §63.3350(d);

(ii) Control device and capture system operating parameter data in accordance with the requirements of §63.3350(c), (e), and (f);

(iii) Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of §63.3360(c);

(iv) Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of §63.3360(d);

(v) Overall control efficiency determination using capture efficiency and control device destruction or removal efficiency test results in accordance with the requirements of §63.3360(e) and (f); and

(vi) Material usage, organic HAP usage, volatile matter usage, and coating solids usage and compliance demonstrations using these data in accordance with the requirements of §63.3370(b), (c), and (d).

(2) Records specified in §63.10(c) for each CMS operated by the owner or operator in accordance with the requirements of §63.3350(b).

(b) Each owner or operator of an affected source subject to this subpart must maintain records of all liquid-liquid material balances performed in accordance with the requirements of §63.3370. The records must be maintained in accordance with the requirements of §63.10(b).

Delegation of Authority

§ 63.3420 What authorities may be delegated to the States?

(a) In delegating implementation and enforcement authority to a State under 40 CFR part 63, subpart E, the authorities contained in paragraph (b) of this section must be retained by the Administrator and not transferred to a State.

(b) Authority which will not be delegated to States: §63.3360(c), approval of alternate test method for organic HAP content determination; §63.3360(d), approval of alternate test method for volatile matter determination.

Table 1 to Subpart JJJJ of Part 63—Operating Limits if Using Add-On Control Devices and Capture System

If you are required to comply with operating limits by §63.3321, you must comply with the applicable operating limits in the following table:

For the following device:	You must meet the following operating limit:	And you must demonstrate continuous compliance with operating limits by:
1. Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.3360(e)(3)(i)	i. Collecting the combustion temperature data according to §63.3350(e)(9); ii. Reducing the data to 3-hour block averages; and iii. Maintain the 3-hour average combustion temperature at or above the temperature limit.
2. Catalytic oxidizer	a. The average temperature at the inlet to the catalyst bed in any 3-hour period must not fall below the combustion temperature limit established according to §63.3360(e)(3)(ii)	i. Collecting the catalyst bed inlet temperature data according to §63.3350(e)(9); ii. Reducing the data to 3-hour block averages; and iii. Maintain the 3-hour average catalyst bed inlet temperature at or above the temperature limit.
	b. The temperature rise across the catalyst bed must not fall below the limit established according to §63.3360(e)(3)(ii)	i. Collecting the catalyst bed inlet and outlet temperature data according to §63.3350(e)(9); ii. Reducing the data to 3-hour block averages; and iii. Maintain the 3-hour average temperature rise across the catalyst bed at or above the limit.
3. Emission capture system	Submit monitoring plan to the Administrator that identifies operating parameters to be monitored according to §63.3350(f)	Conduct monitoring according to the plan (§63.3350(f)(3)).

Table 2 to Subpart JJJJ of Part 63—Applicability of 40 CFR Part 63 General Provisions to Subpart JJJJ

You must comply with the applicable General Provisions requirements according to the following table:

General provisions reference	Applicable to subpart JJJJ	Explanation
§63.1(a)(1)–(4)	Yes	
§63.1(a)(5)	No	Reserved.

§63.1(a)(6)–(8)	Yes.	
§63.1(a)(9)	No	Reserved.
§63.1(a)(10)–(14)	Yes.	
§63.1(b)(1)	No	Subpart JJJJ specifies applicability.
§63.1(b)(2)–(3)	Yes.	
§63.1(c)(1)	Yes.	
§63.1(c)(2)	No	Area sources are not subject to emission standards of subpart JJJJ.
§63.1(c)(3)	No	Reserved.
§63.1(c)(4)	Yes.	
§63.1(c)(5)	Yes.	
§63.1(d)	No	Reserved.
§63.1(e)	Yes.	
§63.1(e)(4)	No.	
§63.2	Yes	Additional definitions in subpart JJJJ.
§63.3(a)–(c)	Yes.	
§63.4(a)(1)–(3)	Yes.	
§63.4(a)(4)	No	Reserved.
§63.4(a)(5)	Yes.	
§63.4(b)–(c)	Yes.	
§63.5(a)(1)–(2)	Yes.	
§63.5(b)(1)	Yes.	
§63.5(b)(2)	No	Reserved.
§63.5(b)(3)–(6)	Yes.	
§63.5(c)	No	Reserved.
§63.5(d)	Yes.	
§63.5(e)	Yes.	
§63.5(f)	Yes.	
§63.6(a)	Yes	Applies only when capture and control system is used to comply with the standard.
§63.6(b)(1)–(5)	No	
§63.6(b)(6)	No	Reserved.
§63.6(b)(7)	Yes.	
§63.6(c)(1)–(2)	Yes.	
§63.6(c)(3)–(4)	No	Reserved.
§63.6(c)(5)	Yes.	
§63.6(d)	No	Reserved.
§63.6(e)	Yes	Provisions pertaining to SSMP, and CMS do not apply unless an add-on control system is used to comply with the emission limitations.
§63.6(f)	Yes.	
§63.6(g)	Yes.	

§63.6(h)	No	Subpart JJJJ does not require continuous opacity monitoring systems (COMS).
§63.6(i)(1)–(14)	Yes.	
§63.6(i)(15)	No	Reserved.
§63.6(i)(16)	Yes.	
§63.6(j)	Yes.	
§63.7	Yes.	
§63.8(a)(1)–(2)	Yes.	
§63.8(a)(3)	No	Reserved.
§63.8(a)(4)	No.	
§63.8(b)	Yes.	
§63.8(c)(1)–(3)	Yes	§63.8(c)(1)(i) & (ii) only apply if you use capture and control systems and are required to have a start-up, shutdown, and malfunction plan.
§63.8(c)(4)	Yes.	
§63.8(c)(5)	No	Subpart JJJJ does not require COMS.
§63.8(c)(6)–(c)(8)	Yes	Provisions for COMS are not applicable.
§63.8(d)–(f)	Yes	§63.8(f)(6) only applies if you use CEMS.
§63.8(g)	Yes	Only applies if you use CEMS.
§63.9(a)	Yes.	
§63.9(b)(1)	Yes.	
§63.9(b)(2)	Yes	Except §63.3400(b)(1) requires submittal of initial notification for existing affected sources no later than 1 year before compliance date.
§63.9(b)(3)–(5)	Yes.	
§63.9(c)–(e)	Yes.	
§63.9(f)	No	Subpart JJJJ does not require opacity and visible emissions observations.
§63.9(g)	Yes	Provisions for COMS are not applicable.
§63.9(h)(1)–(3)	Yes.	
§63.9(h)(4)	No	Reserved.
§63.9(h)(5)–(6)	Yes.	
§63.9(i)	Yes.	
§63.9(j)	Yes.	
§63.10(a)	Yes.	
§63.10(b)(1)–(3)	Yes	§63.10(b)(2)(i) through (v) only apply if you use a capture and control system.
§63.10(c)(1)	Yes.	
§63.10(c)(2)–(4)	No	Reserved.
§63.10(c)(5)–(8)	Yes.	
§63.10(c)(9)	No	Reserved.
§63.10(c)(10)–	Yes.	

(15)		
§63.10(d)(1)–(2)	Yes.	
§63.10(d)(3)	No	Subpart JJJJ does not require opacity and visible emissions observations.
§63.10(d)(4)–(5)	Yes.	
§63.10(e)(1)–(2)	Yes	Provisions for COMS are not applicable.
§63.10(e)(3)–(4)	No.	
§63.10(f)	Yes.	
§63.11	No.	
§63.12	Yes.	
§63.13	Yes.	
§63.14	Yes	Subpart JJJJ includes provisions for alternative ASME test methods that are incorporated by reference.
§63.15	Yes.	

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